



# UNITED STATES ENVIRONMENTAL PROTECTION AGENCY WASHINGTON, D.C. 20460

# **NOTIFICATION**

JUN 1 6 2014

OFFICE OF CHEMICAL SAFETY AND POLLUTION PREVENTION

Prime Source LLC c/o Cheryl Wagner Wagner Regulatory Associates, Inc. P.O. Box 640 7217 Lancaster Pike, Suite A Hockessin, DE 19707

Subject:

Notification to add a state of New York restriction to prohibit soil injection

EPA Registration No. 89442-5

Primary Brand Name: Imidacloprid 2F Select

Submission Date: June 3, 2014

Dear Ms. Wagner:

The Agency is in receipt of your Application for Pesticide Notification under PRN 98-10 dated and finds that the action requested falls within the scope of PRN 98-10. The label submitted with the application has been stamped "Notification" and will be placed in our records. If you have any questions, please contact Gene Benbow at (703) 347-0235 or via email at benbow.gene@epa.gov.

Sincerely,

Gene Benbow Wildlife Biologist Insecticide-Rodenticide Branch Registration Division (7505P)

| Please read instructions on revers  | <u>e berore completina form</u>                     | '.             | <del> </del>                          | Form App                    |          | strat       | ion OPP Iden                  | tifier Number                           |
|---|---|----------------|---------------------------------------|-----------------------------|----------|-------------|-------------------------------|---|
|   | United S  | States         |                                       |                             | ┦'``     | _13t1at     |                               |   |
| <b>€EPA</b> E   | nvironmental Pr                                     |                | Agency                                |                             | An       | nendm       | ent                           | 2/,                                     |
|   | Washington,   | DC 20460       |                                       | X                           | Ot       | her         |                               | /46                                     |
|   | Applie  | cation for     | r Pesticide                           |                             | on I     |             |                               |   |
| 1. Company/Product Number   | .,,рр   | <u> </u>       | 2. EPA Prod                           |                             |          |             | 3. Proposed CI                | assification                            |
| 89442-5   |   |                | Venus Eagle                           |                             |          |             |                               |   |
| 4. Company/Product (Name)   |   | <del></del>    | PM#                                   |                             |          | <del></del> | † <sub></sub>                 | <b>5</b>                                |
| Prime Source LLC/ Imidaclopi  | rid 2F Select                                       |                | 1                                     |                             |          |             | X None                        | Restricted                              |
| 5. Name and Address of Appl   | icant (Include Zip Cod                              | e)             | 6. Expedite                           | d Reviev                    | v. In ac | cordance    | with FIFRA Secti              | on 3(c)(3)                              |
| Prime Source LLC  |   |                | (b)(l), my pro                        | duct is s                   | imilar o | r identica  | l in composition ar           | nd labeling                             |
| c/o Wagner Regulatory As  | sociates, Inc.                                      |                | EPA Reg. No.                          |                             |          |             |                               |   |
| P.O. Box 640<br>Hockessin, DE 19707   |   |                | Product Nam                           | ne:                         |          |             |                               | •                                       |
| ☐ Check i   | f this is a new address                             |                |                                       |                             |          |             |                               | · .                                     |
|   |   | Se             | ction - II                            |                             |          |             |                               |   |
| Amendment - Explain be  | low.  |                |                                       | printed lat<br>cy letter da |          | sponse to   |                               |   |
| Resubmission in respons   | se to Agency letter dated                           |                |                                       | oo" Applic                  |          | -           |                               |   |
| X Notification - Explain belo   | ow.   |                | Other                                 | - Explain                   | below.   |             |                               |   |
| Explanation: Use additional   |   |                |                                       |                             |          |             |                               | <del></del>                             |
| Notification adding the restrictions consistent with the provisions   | ion to prohibit soil injec<br>of PR Notice 98-10 an | tion applicat  | tions in Nassau (<br>lations at 40 CF | or Suffoll<br>R 152 46      | k counti | es of Nev   | w York. This notific          | ation is                                |
| labeling or the confidential sta  | tement of formula of th                             | is product. I  | understand that                       | t it is a vie               | olation  | of 18 U.S   | .C. Sec. 1001 to w            | illfully make                           |
| any false statement to EPA. I 1 152.46, this product may be in  |   |                |                                       |                             |          |             |                               |   |
| FIFRA.  |   |                |                                       | Sincin ac                   | - and    |             | 3 under occilons              | 12 and 14 or                            |
|   |   | Se             | ction - III                           |                             |          |             |                               |   |
| 1. Material This Product Wil  | I Be Packaged In: Unit Packaging                    |                | Water Soluble P                       | lookogina                   | . 12     | Type of C   | Container                     |   |
| Child-Resistant Packaging Yes*  | Yes   | . [            | Yes                                   | rackaging                   | ,   2.   | Type of C   | Metal                         |   |
| X No  | X No  |                | X No                                  |                             |          | X           | Plastic                       |   |
|   | If "Yes"  | No. per        | If "Yes"                              | No. per                     | 7        |             | Glass                         |   |
| * Certification must  | Unit Packaging wgt.                                 | container      | Package wgt                           | containe                    | er       |             | Paper                         |   |
| be submitted  |   |                |                                       |                             |          |             | Other (Specify) HI            | OPE lined bags                          |
| Location of Net Contents Ir   | formation   | 4. Size(s) F   | Retail Container                      | <u> </u>                    | 5. Loc   | ation of L  | abel Directions               | <del></del>                             |
| X Label Con   | tainer  | 1 gal., 2.5 g  |                                       |                             | X        | On Lat      | bel ccc                       | :                                       |
|   |   |                |                                       |                             |          | On Lat      | peling accompany              |   |
| 6. Manner in Which Label is A   | Affixed to Product                                  | T I it         | hograph                               |                             | Other    | adhe        | esive backed ໂຝຣel            | (                                       |
| . Walling in villar Laborio   | ,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,             |                | per glued                             |                             | 011101   |             | c C                           | , , ,                                   |
|   |   | Ste            | enciled                               |                             |          |             | ر د د<br>د                    |   |
|   |   | Sec            | ction - IV                            |                             |          |             | ر ب<br>د د                    | £ 6 6 6 6 6 6 6 6 6 6 6 6 6 6 6 6 6 6 6 |
| Contact Point (Complete ite   |   | identification | of individual to                      | be conta                    | cted, if |             |                               |   |
| Name<br>Cheryl Wagner   | Title   | Agent for F    | Prime Source LL                       | .C                          | i        | (302) 638   | ne No. (Include Are<br>5 7289 | ,                                       |
|   | Certific  | ation          |                                       |                             |          |             | 6. Date Application           |   |
| I certify that the statements I have made on this form and all attachments thereto are true, accurate and complete.  Received Complete.  Received Complete. |   |                | -                                     |                             |          |             |                               |   |
| both under applicable law.  |   |                | <u> </u>                              |                             |          |             | (Stam                         | ped)                                    |
| 2. Signature & Wag  | N 9   | 3. Title       |                                       |                             |          |             |                               |   |
| <u> </u>  |   |                | Prime Source LL                       | _C                          |          |             |                               |   |
| 4. Typed Name   |   | 5. Date        | `                                     |                             |          |             |                               |   |
| Cheryl Wagner   |   | June 3, 20     | )14                                   |                             |          | ĺ           |                               |   |



Wagner Regulatory Associates, Inc. P.O. Box 640 7217 Lancaster Pike, Suite A Hockessin, Delaware 19707

June 3, 2014

Document Processing Desk (NOTIF) ATTN: Ms. Venus Eagle, PM 1 Registration Division (7504P) U.S. Environmental Protection Agency Room S-4900, One Potomac Yard 2777 South Crystal Drive Arlington, Virginia 22202-4501

Dear Ms. Eagle,

Re: Imidacloprid 2F Select EPA Reg. No. 89442-5 Notification of addition of state specific restriction

On behalf of Prime Source LLC, I am submitting this notification of the addition of the State of New York mandated restriction to prohibit soil injection applications in Nassau or Suffolk counties of New York.

In support of this notification I have enclosed:

- An agent letter authorizing WRA, Inc. to make this submission on Prime Source LLC's behalf.
- EPA Notification form 8570-1
- 2 copies of the revised labeling—one clean copy and one highlighted copy

If you have any questions concerning this submission please contact the undersigned.

Sincerely,

Charge & Wagne

Cheryl Wagner Agent for Prime Source LLC

enclosures

Prime Source LLC

Notification – NY specific language – Ornamentals

# **Imidacloprid 2F Select**

For uses in pest management and suppression of insects that may vector plant diseases, and maintenance of plant health.

**ACTIVE INGREDIENT:** 

Imidacloprid, 1-[(6-Chloro-3-pyridinyl)methyl]N-nitro-2-imidazolidinimine.21.4%OTHER INGREDIENTS:78.6%TOTAL:100.0%

Contains 2 pounds of imidacloprid per gallon.

Shake well before using READ AND FOLLOW DIRECTIONS PRIOR TO USE

# KEEP OUT OF REACH OF CHILDREN CAUTION

|                            | FIRST AID  |
|----------------------------|--|
| If Swallowed:              | <ul> <li>Call a poison control center or doctor immediately for treatment advice.</li> <li>Have person sip a glass of water if able to swallow.</li> <li>Do not induce vomiting unless told to do so by a poison control center or doctor.</li> <li>Do not give anything by mouth to an unconscious person.</li> </ul> |
| If on skin or<br>clothing: | <ul> <li>Take off contaminated clothing.</li> <li>Rinse skin immediately with plenty of water for 15 to 20 minutes.</li> <li>Call a poison control center or doctor for treatment advice.</li> </ul>   |
| If inhaled:                | <ul> <li>Move the person to fresh air.</li> <li>If person is not breathing, call 911 or an ambulance, then give artificial respiration, preferably mouth-to-mouth if possible.</li> <li>Call a poison control center or doctor for further treatment advice.</li> </ul>  |
| If in eyes:                | <ul> <li>Hold eye open and rinse slowly and gently with water for 15 to 20 minutes.</li> <li>Remove contact lenses, if present, after the first 5 minutes, then continue rinsing eye.</li> <li>Call a poison control center or doctor for treatment advice.</li> </ul>   |

**NOTE TO PHYSICIAN**: No specific antidote is available. Treat the patient symptomatically.

Have a product container or label with you when calling a poison control center or doctor, or going for treatment. For emergency information, call the National Pesticides Information Center (NPIC) at 1-800-858-7378, Mon. – Fri. 7:30 am to 3:30 pm Pacific Time or your poison control center at 1-800-222-1222.

See inside booklet for additional PRECAUTIONARY STATEMENTS, DIRECTIONS FOR USE, AND STORAGE AND DISPOSAL

| STORAGE AND DISPOSAL.              | 6.5.6.6     |
|------------------------------------|-------------|
| EPA Reg. No. 89442-5               | EPA Est. No |
| Manufactured for:                  | ecce        |
| Prime Source, LLC                  | ( ( (       |
| 4609 E. Boonville-New Harmony Road | ς.          |
| Evansville, IN 47725               | C C C C     |
| Net Contents 1 gallon              |             |
|                                    | C C C C     |
|                                    |             |

**NOTIFICATION** 

JUN 16 2014

# PRECAUTIONARY STATEMENTS HAZARDS TO HUMANS AND DOMESTIC ANIMALS CAUTION

Harmful if swallowed. Harmful if absorbed through skin. Harmful if inhaled. Causes moderate eye irritation. Avoid contact with eyes, skin, or clothing. Avoid breathing vapor or mist. Prolonged or frequently repeated skin contact may cause allergic reactions in some individuals.

# Personal Protective Equipment (PPE):

# Applicators and other handlers must wear:

- Long-sleeved shirt and long pants
- Chemical-resistant gloves made of any waterproof material such as, barrier laminate, butyl rubber, nitrile rubber, neoprene rubber, natural rubber, polyethylene, polyvinyl chloride (PVC) or viton.
- Shoes plus socks

Follow manufacturer's instructions for cleaning/maintaining personal protective equipment, PPE. If no such instructions for washables exist, use detergent and hot water. Keep and wash PPE separately from other laundry.

#### **ENGINEERING CONTROLS STATEMENTS**

When handlers use closed systems, enclosed cabs, or aircraft in a manner that meets the requirements listed in the Worker Protection Standard (WPS) for agricultural pesticides [40 CFR 170.240(d)(4-6)], the handler PPE requirements may be reduced or modified as specified in the WPS.

# **USER SAFETY RECOMMENDATIONS**

#### User should:

- Wash hands before eating, drinking, chewing gum, using tobacco or using the toilet.
- Remove clothing/PPE immediately if pesticide gets inside. Then wash thoroughly and put on clean clothing.
- Remove PPE immediately after handling this product. Wash the outside of gloves before removing. As soon as possible, wash thoroughly and change into clean clothing.

# **ENVIRONMENTAL HAZARDS**

Do not apply directly to water, areas where surface water is present or to intertidal areas below the mean high water mark. Do not contaminate water when disposing of equipment washwaters.

This product is highly toxic to bees exposed to direct treatment or residues on blooming crops/plants or weeds. Do not apply this product or allow it to drift to blooming crops/plants or weeds if bees are foraging the treatment area. This product is toxic to wildlife and highly toxic to aquatic invertebrates.

This chemical demonstrates the properties and characteristics associated with chemicals detected in ground water. The use of this chemical in areas where soils are permeable, particularly where the water table is shallow, may result in groundwater contamination.

OBSERVE THE FOLLOWING PRECAUTIONS WHEN MIXING AND APPLYING IN THE VICINITY OF AQUATIC AREAS SUCH AS LAKES, RESERVOIRS, RIVERS, PERMANENT STREAMS, MARSHES OF ANATURAL PONDS, ESTUARIES AND COMMERCIAL FISH FARM PONDS.

# PROTECTION OF POLLINATORS



# APPLICATION RESTRICTIONS EXIST FOR THIS

PRODUCT BECAUSE OF RISK TO BEES AND OTHER INSECT POLLINATORS. FOLLOW APPLICATION RESTRICTIONS FOUND IN THE DIRECTIONS FOR USE TO PROTECT POLLINATORS.

Look for the bee hazard icon in the Directions for Use for each application site for specific use restrictions and instructions to protect bees and other insect pollinators.

# This product can kill bees and other insect pollinators.

Bees and other insect pollinators will forage on plants when they flower, shed pollen, or produce nectar.

Bees and other insect pollinators can be exposed to this pesticide from:

- Direct contact during foliar applications, or contact with residues on plant surfaces after foliar applications
- o Ingestion of residues in nectar and pollen when the pesticide is applied as a seed treatment, soil, tree injection, as well as foliar applications.

When Using This Product Take Steps To:

- o Minimize exposure of this product to bees and other insect pollinators when they are foraging on pollinator attractive plants around the application site.
- o Minimize drift of this product on to beehives or to off-site pollinator attractive habitaເ. o Drift of this product onto beehives or off-site to pollinator attractive habitat can resulf in bee kills.

Information on protecting bees and other insect pollinators may be found at the Pesticide Environmental Stewardship website at:

http://pesticidestewardship.org/PollinatorProtection/Pages/default.aspx.

Pesticide incidents (for example, bee kills) should immediately be reported to the state/tribal lead agency. For contact information for your state, go to: www.aapco.org/officials.html. Pesticide incidents should also be reported to the National Pesticide Information Center at: <a href="https://www.npic.orst.edu">www.npic.orst.edu</a> or directly to EPA at: beekill@epa.gov

#### SPRAY DRIFT MANAGEMENT

The interaction of many equipment- and weather-related factors determines the potential for spray drift. The applicator is responsible for considering all of these factors when making application decisions.

Avoiding spray drift is the responsibility of the applicator.

# Importance of Droplet Size

An important factor influencing drift is droplet size. Small droplets (<150-200 microns) drift to a greater extent than large droplets. Within typical equipment specifications, applications should be made to deliver the largest droplet spectrum that provides sufficient control and coverage. Formation of very small droplets may be minimized by appropriate nozzle selection.

# Wind Speed

Drift potential increases at wind speeds of less than 3 mph (due to inversion potential) or more than 10 mph. However, many factors, including droplet size, canopy and equipment specifications determine drift potential at any given wind speed. Do not apply when winds are greater than 15 mph and avoid gusty and windless conditions. Risk of exposure to sensitive aquatic areas can be reduced by avoiding applications when wind direction is toward the aquatic area.

# **Restrictions During Temperature Inversions:**

Do not make ground applications during temperature inversions. Drift potential is high during temperature inversions. Temperature inversions restrict vertical air mixing, which causes small suspended droplets to remain close to the ground and move laterally in a concentrated cloud. Temperature inversions are characterized-by-increasing temperature-with altitude and-are-common-on-nights with-limited cloud-cover-and-light to no wind. They begin to form as the sun sets and often continue into the morning. Their presence can be indicated by ground fog; however, if fog is not present, inversions can also be identified by the movement of smoke from a ground source. Smoke that layers and moves laterally in a concentrated cloud (under low wind conditions) indicates an inversion, while smoke that moves upward and rapidly dissipates indicates good vertical mixing.

# Mixing and Loading Requirements

To avoid potential contamination of groundwater use properly designed and maintained containment pad for mixing and loading of any pesticide into application equipment. If containment pad is not used, maintained a minimum distance of 25 feet between mixing and loading area and potential surface to groundwater conduits such as field sumps, uncased well heads, sinkholes or field drains.

# **Aerial Applications**

The spray boom should be mounted on the aircraft so as to minimize drift caused by wing tip vortices. The minimum practical boom length should be used, and must not exceed 75% of the wing span or rotor.

# Airblast (Air Assist) Specific Instructions for Tree Crops and Vineyards

Airblast sprayers carry droplets into the canopy of trees/vines via a radially, or laterally directed air stream. Follow these spray drift management practices:

- Adjust deflectors and aiming devices so that spray is only directed into the canopy;
- Block off upward-pointed nozzles when there is no overhanging canopy:
- Use only enough air volume to penetrate the canopy and provide good coverage;
- DO NOT allow the spray to go beyond the edge of the cultivated area (i.e., turn off sprayer when turning at end rows);
- Only spray inward, toward the orchard or vineyard, for applications to the outside rows.

Prime Source LLC

Notification – NY specific language – Ornamentals

# **No-Spray Zone Requirements for Soil Applications**

Do not apply within 25 feet of lakes, reservoirs, rivers, permanent streams, marshes or natural ponds, estuaries and commercial fish farm ponds.

# **Runoff Management**

Do not cultivate within 10 feet of the aquatic areas to allow growth of a vegetative filter strip. When using Imidacloprid 2F Select on erodible soils, Best Management Practices for minimizing runoff should be employed. Consult your local Natural Resources Conservation Service for recommendations in your use area.

# **Endangered Species Notice**

Under the Endangered Species Act, it is a Federal Offense to use any pesticide in a manner that results in the death of a member of an endangered species. Consult your local county bulletin, County Extension Agent, or Pesticide State Lead Agency for information concerning endangered species in your area.

# **Resistance Management**

Some insects have developed resistance to imidacloprid after repeated use. Users should incorporate resistance management practices such as rotating classes of insecticides when possible.

Insect species that have acquired a tolerance to imidacloprid and other neonicotinoid (Group 4A) insecticides may become dominant if Group 4A are used repeatedly to control targeted species. This can eventually result in the loss of this class of insecticides as a viable control.

The active ingredient in Imidacloprid 2F Select belongs to the neonicotinoid chemical class. Insect pests resistant-to-other-chemical classes have not shown-cross-resistance-to Imidacloprid-2F Select. To-maintain-susceptibility to this class of chemistry in insect species with high resistance development potential, it is recommended that for each crop season: 1) only a single, soil application of Imidacloprid 2F Select be made; 2) foliar applications of products from this same class not be made following a long residual, soil application of Imidacloprid 2F Select, or other neonicotinoid products.

Foliar applications of Imidacloprid 2F Select or other Group 4A products from the neonicotinoid chemical class should not be used on crops previously treated with a long-residual, soil-applied product from the neonicotinoid chemical class.

Other Group 4A, neonicotinoid products labeled for foliar treatments include, but are not limited to: Actara, Assail, CALYPSO®, Centric, Intruder, LEVERAGE® and TRIMAX®.

Additional information on insect resistance management can be obtained from your local extension specialist, certified crop advisor, product manufacturer or visit the Insecticide Resistance Action Committee (IRAC) on the web at <a href="http://irac-online.org/">http://irac-online.org/</a>.

# **DIRECTIONS FOR USE**

It is a violation of Federal law to use this product in a manner inconsistent with its labeling.

See individual crops for specific pollinator protection application restrictions. If none exist under the specific crop, for foliar applications, follow these application directions for crops that are contracted to have pollinators; services for food/feed & commercially grown ornamentals that are attractive to pollinators.

9/46

Notification - NY specific language - Ornamentals



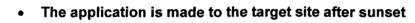
### 1. FOR CROPS UNDER CONTRACTED POLLINATION SERVICES

Do not apply this product while bees are foraging. Do not apply this product until flowering is complete and all petals have fallen unless the following condition has been met.

If an application must be made when managed bees are at the treatment site, the beekeeper providing the pollination services must be notified no less than 48-hours prior to the time of the planned application so that the bees can be removed, covered or otherwise protected prior to spraying.

# 2. FOR FOOD CROPS AND COMMERCIALLY GROWN ORNAMENTALS NOT UNDER CONTRACT FOR POLLINATION SERVICES BUT ARE ATTRACTIVE TO POLLINATORS

Do not apply this product while bees are foraging. Do not apply this product until flowering is complete and all petals have fallen unless one of the following conditions is met:



- The application is made to the target site when temperatures are below 55°F
- The application is made in accordance with a government-initiated public health response
- The application is made in accordance with an active state-administered apiary registry program where beekeepers are notified no less than 48-hours prior to the time of the planned application so that the bees can be removed, covered or otherwise protected prior to spraying
- The application is made due to an imminent threat of significant crop loss, and a
  documented determination consistent with an IPM plan or predetermined economic
  threshold is met. Every effort should be made to notify beekeepers no less than 48hours prior to the time of the planned application so that the bees can be removed,
  covered or otherwise protected prior to spraying.



3. Non-Agricultural Uses:

Do not apply while bees are foraging. Do not apply this product to plants that are flowering. Only apply after all flower petals have fallen off.

Do not apply this product in a way that will contact workers or other persons, either directly or through drift. Only protected handlers may be in the area during application. For any requirements specific to your State or Tribe, consult the agency responsible for pesticide regulation.

# AGRICULTURAL USE REQUIREMENTS

Use this product only in accordance with its labeling and with the Worker Protection Standard, 40 CFR part 170. This Standard contains requirements for the protection of agricultural workers on farms, forests, nurseries, and greenhouses, and handlers of agricultural pesticides. It contains requirements for training, decontamination, notification, and emergency assistance. It also contains specific instructions and exceptions pertaining to the statements on this label about personal protective equipment (PPE) and restricted-entry interval. The requirements in this box only apply to uses of this product that are covered by the Worker Protection Standard.

**Do not** enter or allow worker entry into treated areas during the restricted-entry interval (REI) of 12 hours. **Exception**: If the product is soil-injected or soil-incorporated, the Worker Protection Standard, under certain circumstances, allows workers to enter the treated area if there will be no contact with anything that has been treated.

PPE required for early entry to treated areas that is permitted under the Worker Protection Standard and that involves contact with anything that has been treated, such as plants, soil, or water, is:

- Coveralls
- Chemical-resistant gloves made of any waterproof material such as, barrier laminate, butyl rubber, nitrile rubber, neoprene rubber, natural rubber, polyethylene, polyvinyl chloride (PVC) or viton
- Shoes plus socks

# NON-AGRICULTURAL USE REQUIREMENTS

The requirements in this box apply to uses of this product that are NOT with-in the scope of the Worker Protection Standard for agricultural pesticides (40 CFR Part 170). The WPS applies when this product is used to produce agricultural plants on farms, forests, nurseries, or greenhouses.

Keep children and pets off treated area until dry.

# **APPLICATION INSTRUCTIONS**

# For Foliar Applications

Apply as a directed or broadcast foliar spray. Thorough coverage of foliage is necessary without runoff for optimum insecticidal efficacy. Use adequate spray volumes, properly calibrated application equipment and spray adjuvant if necessary to obtain thorough coverage. Failure to provide adequate coverage and retention of Imidacloprid 2F Select on leaves and fruit may result in loss of insect control or delay in onset of activity. Apply Imidacloprid 2F Select with properly calibrated ground or aerial application equipment. Minimum spray volumes, unless otherwise specified on crop specific application instructions sections, are 10 gallons/Acre by ground applications and 5 gallons/Acre through aerial equipment. Imidacloprid 2F Select may also be applied by overhead chemigation (see additional CHEMIGATION DIRECTIONS FOR USE section below) if allowed in crop specific application instruction section.

# For Soil Applications

Direct applications of Imidacloprid 2F Select into the seed or root-zone of crop. Lack of correct application of Imidacloprid 2F Select into seed or root-zone could result in lessened or delayed efficacy. Imidacloprid 2F Select may be applied with ground or chemigation application.

Do not apply with aerial application equipment. Broadcast, foliar applications are only recommended to seedling flats or trays, or where product is intended to be washed from foliage to soil prior to drying on foliage:

Best results of Imidacloprid 2F Select application are achieved when applications are made to the root-zone of plants. Earlier application of Imidacloprid 2F Select to developing plant results in earlier protection. Imidacloprid 2F Select is a systemic insecticide and moves from the plant's root system to the upper vegetative parts via the xylem tissue. This movement results in extended activity of Imidacloprid 2F Select, to control insects that can vector detrimental plant virus transmission. Higher listed rates should be made when insecticidal pressure occurs later in the plants development cycle or when insect pressure is heavy and/or continuous. Despite the

systemic nature of Imidacloprid 2F Select, it usually does not control insects that infest flowers, blooms or fruit. Insects attacking these parts of a plant generally require a foliar type insecticide application. More specific Imidacloprid 2F Select application directions are provided in the crop-specific sections of this label.

Suppression, or less than residual control of certain plant diseases and insect pests including reduced feeding, may also result from a lmidacloprid 2F Select application. Residual control of these pests/diseases may require supplemental control measures.

Imidacloprid 2F Select use on crops grown for production of true seed intended for private or commercial planting is not permitted unless directed by State-specific 24(c) labeling. Extreme care must be taken to minimize exposure of Imidacloprid 2F Select to honey bees and other beneficial pollinators. Contact your local Cooperative Extension Service, PCA's, consultants or Prime Source, LLC representative for additional information regarding application to these types of crops.

Pre-mix Imidacloprid 2F Select with water or other appropriate diluents prior to application. Maintain constant agitation to avoid settling.

**RESTRICTION**: For applications outdoors (except for plants grown in trays or benches), **do not** apply more than 0.50 lbs. active ingredient per acre, per year (365 days), regardless of formulation or method of application.

# MIXING INSTRUCTIONS

- 1. Add 50% of the required amount of water to the spray tank.
- 2. Begin agitation.
- 3. Add labeled rate of Imidacloprid 2F Select.
- 4. Add balance of water needed. Maintain sufficient agitation during both mixing and application. Imidacloprid 2F Select may be tank mixed with other pesticides and/or fertilizer solutions. Refer to "Compatibility" below. When tank mixing Imidacloprid 2F Select with other pesticides, prepare the tank mixture as directed above and follow suggested "Mixing Order" below.

# **Mixing Order for Tank Mixes**

- 1. Wettable powders
- 2. Imidacloprid 2F Select
- 3. Emulsifiable concentrates

Maintain good agitation as each pesticide is added. Do not add the next product until the previous is thoroughly mixed. If a fertilizer solution is added, a fertilizer pesticide compatibility agent may be needed. Maintain constant agitation during both mixing and application to ensure uniformity of spray mixture.

#### Compatibility

Unless the applicator has prior knowledge of the compatibility of the intended tank mixture, Prime Source, LLC recommends a small scale test by adding proportionate amounts of each ingredient in the appropriate order to a clear pint or quart sized jar. Cap and shake for 5 minutes, then let set for 5 minutes. Any visual indication of poor mixing or formation of precipitates that cannot be easily re-dispersed indicates incompatibility and the compatibility and c

# **USE IN CHEMIGATION SYSTEMS**

# **Types of Irrigation Systems:**

For Soil Application: Chemigation applications of Imidacloprid 2F Select may only be made to grops through chemigation systems as specified in crop-specific Application sections and only through low-pressure irrigation systems unless specifically directed for a given crop. Do not apply Imidacloprid 2F Select through any other type of irrigation system.

**For Foliar Application:** Chemigation applications of Imidacloprid 2F Select may be made to crops through overhead sprinkler chemigation systems if specified in crop-specific instruction sections. DO NOT apply Imidacloprid 2F Select through any other type of irrigation system.

**Water Volume:** Make chemigation applications of Imidacloprid 2F Select as concentrated as possible. Retention of Imidacloprid 2F Select on target site of insect infestation is necessary for optimum activity. DO NOT chemigate Imidacloprid 2F Select in water volumes exceeding 0.10 inch/Acre.

**Uniform Water Distribution and System Calibration**: The irrigation system must provide uniform distribution of treated water. Crop injury, lack of effectiveness, or illegal pesticide residues in the crop can result from non-uniform distribution of treated water. The system must be calibrated to uniformly apply the rates specified. If you have questions about calibration, you should contact State Extension Service specialists, equipment manufacturers or other experts.

**Chemigation Monitoring**: A person knowledgeable of the chemigation system and responsible for its operation, or under the supervision of the responsible person, shall shut the system down and make necessary adjustments should the need arise.

**Drift**: Do not apply when wind speed favors drift beyond the area intended for treatment.

Required System Safety Devices: The system must contain a functional check valve, vacuum relief valve, and low pressure drain appropriately located on the irrigation pipeline to prevent water source contamination from backflow. The pesticide injection pipeline must contain a functional, automatic, quick-closing check valve to-prevent-the-flow-of-fluid-back-toward-the-injection pump. The-pesticide-injection-pipeline must also-contain a functional, normally closed, solenoid-operated valve located on the intake side of the injection pump and connected to the system interlock to prevent fluid from being withdrawn from the supply tank when the irrigation system is either automatically or manually shut down. The system must contain functional interlocking controls to automatically shut off the pesticide injection pump when the water pump motor stops. The irrigation line or water pump must include a functional pressure switch which will stop the water pump motor when the water pressure decreases to the point where pesticide distribution is adversely affected. Systems must use a metering pump, such as a positive displacement injection pump (e.g., diaphragm pump) effectively designed and constructed of materials that are compatible with pesticides and capable of being fitted with a system interlock.

Using Water from Public Water Systems: Public water system means a system for the provision to the public of piped water for human consumption if such system has at least 15 service connections or regularly serves an average of at least 25 individuals daily at least 60 days out of the year. Chemigation systems connected to public water systems must contain a functional, reduced-pressure zone, back flow preventer (RPZ) or the functional equivalent in the water supply line upstream from the point of pesticide introduction. As an option to the RPZ, the water from the public water system should be discharged into a reservoir tank prior to pesticide introduction. There shall be a complete physical break (air gap) between the outlet end of the fill pipe and to top or overflow rim of the reservoir tank of at least twice the inside diameter of the fill pipe. The pesticide injection pipeline must contain a functional automatic quick-closing check valve to prevent the flow of fluid back toward the injection. The pesticide injection pipeline must contain a functional normally closed solenoidoperated valve located on the intake side of the injection pump and connected to the system interfock to prevent fluid from being withdrawn from the supply tank when the irrigation system is either automatically or manually shut down. The system must contain functional interlocking controls to automatically shut off the pesticide injection pump when the water pump motor stops or in cases where there is no water pump, when the water pressure decreases to the point where pesticide distribution is adversely affected. System's must use a metering pump such as a positive displacement injection pump (e.g., diaphragm pump) effectively designed and constructed of materials that are compatible with pesticides and capable of being fitted with a system interlock.

#### **ROTATIONAL CROPS\***

Treated areas may be replanted with any crop specified on an imidacloprid label, or any crop for which a tolerance exists for the active ingredient, as soon as practical following the last application. For crops not listed on an imidacloprid label, or for crops for which no tolerances for the active ingredient have been established, a 12-month plant-back interval must be observed.

| PLANTBACK INTERVAL    | COMMENT   |
|-----------------------|---|
| Immediate Plant-back: | Any crop listed on this label plus the following crops not on this label: barley, bulb vegetables, canola, corn (field, sweet and pop), mustard seed*, onion, rapeseed, sorghum and wheat |
| 30-Day Plant-back:    | Cereals (including buckwheat, millet, oats, rice, rye and triticale), safflower   |
| 12-Month Plant-back:  | All other crops   |

<sup>\*</sup>Cover crops for soil building or erosion control may be planted any time, but do not graze or harvest for food or feed.

# **FIELD CROPS**

# **COTTON - SOIL**

| Pests Controlled                  | Rate (Fl. Oz./1,000 row-feet) | Rate (Fl. Oz./Acre)        |
|-----------------------------------|-------------------------------|----------------------------|
| Cotton aphid, Plant bugs, Thrips, | · 1.3                         | 14.8 to 18.4               |
| Whiteflies                        |                               | (depending on row spacing) |

#### Restrictions:

- Maximum Imidacloprid 2F Select allowed per year: 21.1 fluid ounces/Acre (0.33 lb. Al/A)
- Do not apply more than 0.5 lbs. active ingredient of imidacloprid per acre per year including seed treatment, soil and foliar uses.
- Do not graze treated fields after any application of Imidacloprid 2F Select.

Please see "Resistance Management" section of this label.

# Applications:

Apply label rate of Imidacloprid 2F Select in one of the following methods:

- 1. In-furrow spray during planting directed on or below seed;
- 2. In a narrow band directly below the eventual seed row in a bedding operation 7 or fewer days before planting;
- 3. Chemigation into root-zone through low-pressure drip or trickle irrigation.

# **COTTON - FOLIAR**

| Pests Controlled   | Rate (Fl. Oz./Acre) |
|--|---------------------|
| Aphid, Cotton fleahoppers, Plant bugs (excludes Lygus hesperus), Banded-winged whitefly, Green stink bug, Southern green stink bug, Bollworm/Budworm (ovicidal effect) | 2.0 to 4.0          |
| Pests Suppressed   | Rate (Fl. Oz./Acre) |
| Lygus bugs ( <i>Lygus hesperus</i> ) Whiteflies (other than banded-winged whitefly)  | 3.0 to 4.0          |

#### Restrictions:

- Pre-harvest Interval (PHI): 14 days
- Minimum interval between applications: 7 days
- Maximum Imidacloprid 2F Select allowed per year: 20.0 fluid ounces/Acre (0.31 lb. AI/A)
- Do not graze treated fields after any application of Imidacloprid 2F Select.
- Do not apply more than 0.5 lbs. active ingredient of imidacloprid per acre per year including seed treatment, soil and foliar uses.

Please see "Resistance Management" section of this label.

# Applications:

Imidacloprid 2F Select may be applied through properly calibrated ground, aerial or chemigation application equipment.

**Tank Mix Specifications** 

| Pests Controlled (In addition to pests listed above)  | Imidacloprid 2F Select<br>Rate (Fl. Oz./Acre) | Bidrin® 8*<br>Rate (Fl. Oz./Acre) |
|---|---|-----------------------------------|
| For early season control of: Thrips   | 2.0 to 3.0                                    | 1.6 to 3.2                        |
| For mid to late season control of: Plant bugs, Stink bugs (including Brown stink bug), Grasshoppers, Saltmarsh caterpillar, Cotton leafperforator | 2.0 to 3.0                                    | 4.0 to 8.0                        |

Restrictions (In addition to Restrictions listed above):

\*Refer to the Bidrin® 8 product label for specific use instructions; follow the most restrictive precautions and restrictions on the labels of all products used in mixtures.

#### POTATO - SOIL

| Pests Controlled  | Rate (Fl. Oz./1,000 row-feet) | Rate (Fl. Oz./Acre) |
|---|-------------------------------|---------------------|
| Aphids, Colorado potato beetle,<br>Flea beetles, Leafhoppers, Potato<br>psyllid                             | 0.9 to 1.3                    | 13.0 to 20.0        |
| Pests/Diseases Suppressed   | Rate (Fi. Oz./1,000 row-feet) | Rate (Fl. Oz./Acre) |
| Symptoms of: Potato leaf roll virus (PLRV), Potato yellows, Net necrosis Wireworms (with in-furrow spray at | 0.9 to 1.3                    | 13.0 to 20.0        |
| planting)   |                               |                     |

#### Restrictions:

Maximum amount allowed per year: 20.0 fluid ounces/Acre (0.31 lb. Al/A)

# Applications:

Apply specified dosage of Imidacloprid 2F Select in one of the following methods:

- 1. In-furrow spray during planting directed on the seed pieces or seed potatoes;
- 2. Subsurface side-dress on both sides of the row covered with 3 or more inches of soil;
- 3. Narrow band spray at ground cracking directly over the row during hilling covered with 3 or more inches of soil:
- 4. In the bedding operation (7 days or less) before planting, apply a narrow band directly below the eventual seed row. To be effective, applications must be placed below soil-surface and in contact with seed piece or within root-zone. For potatoes grown on highly permeable soils with shallow water table, at-plant applications of Imidacloprid 2F Select may be made in a 2-to 4-inch band (width of planter shoe opening) and completely covered.

#### POTATO\* - Seed Piece Treatment

| Pests Controlled   | Rate (Fl. Oz./100 lbs. seed) | Rate (Fl. Oz:/Acre) |  |
|--|------------------------------|---------------------|--|
| Aphids, Colorado potato beetle,<br>Flea beetles, Leafhoppers, Potato<br>Psyllids, Wireworms (seed piece<br>protection) | 0.4 to 0.8                   | 8.0 to 16.0         |  |
| Pests/Diseases Suppressed  | Rate (Fl. Oz./100 lbs. seed) | Rate (Fl. Oz:/Acre) |  |
| Symptoms of: Potato leaf roll virus (PLRV), Potato yellows, Net necrosis (PLRV)  | 0.8                          | 16 (3               |  |

# Restrictions:

- Maximum amount allowed per year: 20.0 fluid ounces/Acre (0.31 lb. Al/A)
- DO NOT use treated seed pieces for food, feed, or fodder.

DO NOT apply any subsequent application of Imideal agrid 2E Salact (in furrous), or any other imideal agrid

 DO NOT apply any subsequent application of Imidacloprid 2F Select (in-furrow), or any other imidacloprid product following an imidacloprid seed-piece treatment.

# Applications:

Apply specified dosage as a diluted spray onto seed-pieces using a shielded spray system. Dilute with 3 parts water, or less, to 1 part Imidacloprid 2F Select. Maintain agitation during application. Fungicidal dust treatments may be applied after an Imidacloprid 2F Select application. Apply only in areas with adequate ventilation. Plant seed-pieces as soon as possible after treating. Seed-pieces treated with Imidacloprid 2F Select should not be exposed to sunlight.

\* Based on a seeding rate of 2,000 lbs./acre.

#### **POTATO - FOLIAR**

| Pests Controlled                              | Rate (Fl. Oz./Acre) |
|---|---------------------|
| Aphids, Colorado potato beetle, Flea beetles, | 3.0                 |
| Fleahoppers, Psyllids                         |                     |

# Restrictions:

- Pre-Harvest Interval (PHI): 7 days
- Minimum interval between applications: 7 days
- Maximum amount allowed per year: 12.8 fluid ounces/Acre (0.2 lb. Al/A)

# **SOYBEANS\* - FOLIAR**

| Pests Controlled                            | Rate (Fl. Oz./Acre) |
|---|---------------------|
| Aphids, Bean leaf beetle, Cucumber beetles, |                     |
| Rootworm adults, Japanese beetles (adults), | 3.0                 |
| Leafhoppers, Whiteflies                     |                     |

#### Restrictions:

- Pre-Harvest Interval (PHI): 21 days
- Minimum interval between applications: 7 days
- Maximum amount allowed per year: 9.0 fluid ounces/Acre (0.14 lb. Al/A)
- \*Use not permitted in California unless otherwise directed by state specific 24(c) labeling.

# **TOBACCO - SOIL**

| Pests Controlled                          | Rate (Fl. Oz./1,000 plants) | Rate (Fl. Oz./1,000 plants)           |
|---|-----------------------------|---------------------------------------|
| ,   | (as Seedling Tray Drench)   | (In-Furrow or Transplant-Water)       |
| Aphids, Flea beetles                      | 1.0                         | 1.4                                   |
| Mole Crickets, Whiteflies,<br>Wireworms   | 1.4 to 2.8                  | 1.8 to 2.8                            |
| Pests/Disease Suppressed                  |                             | (((                                   |
| Cutworms Symptoms of: Tomato spotted wilt | 1.4 to 2.8                  | 1.8 to 2.8                            |
| virus (TSWV)                              |                             | ( ( ( ( ( ( ( ( ( ( ( ( ( ( ( ( ( ( ( |

#### Restrictions:

- Pre-Harvest Interval (PHI): 14 days
- Maximum Imidacloprid 2F Select allowed per year: 32.0 fluid ounces/Acre (0.50 lb. AI/A)

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# **Applications:**

Apply specified dosage of Imidacloprid 2F Select in one of the following methods:

- 1. Broadcast foliar spray to seedlings in trays (tray drench) not more than 7 days prior to transplanting. Follow as soon as possible with overhead irrigation to wash Imidacloprid 2F Select from foliage into potting media. Failure to wash Imidacloprid 2F Select from foliage may result in a reduction in pest control. Handle transplants carefully during setting to avoid dislodging treated potting media from roots;
- 2. In-furrow spray or transplant-water drench during setting;
- 3. Chemigation into root-zone through low-pressure drip, trickle, micro-sprinkler or equivalent equipment.

**Important Notes:** Proper drench applications to plants in trays with Imidacloprid 2F Select is generally the best method of application. However, the specified rate of Imidacloprid 2F Select may be applied as combination of the tray drench in the planthouse and/or transplant-water drench in field. Adverse growing conditions may cause a delay in uptake of Imidacloprid 2F Select into the plant and a delay in control.

# TOBACCO - FOLIAR

| Pests Controlled  | Rate (Fl. Oz./Acre) |
|---|---------------------|
| Aphids  | 1.6 to 3.2          |
| Flea beetles, Japanese beetle   | 3.2                 |
| Restrictions:   |                     |
| <ul> <li>Pre-Harvest Interval (PHI): 14 days</li> </ul>                                     |                     |
|   | S                   |
| <ul> <li>Maximum amount allowed per year: 18.0 fluid ounces/Acre (0.28 lb. Al/A)</li> </ul> |                     |

# VEGETABLE AND SMALL FRUIT CROPS Application Instructions

# For Foliar Applications

Apply specified rate per acre as a broadcast or directed foliar spray as pest populations begin to build. Thorough uniform coverage is necessary to achieve optimal control. A spray adjuvant may be used to improve coverage. Imidacloprid 2F Select may not knock down established and heavy insect populations. Two applications may be required to achieve control. Scout fields and retreat if needed. Imidacloprid 2F Select may be tank mixed with other insecticides for knockdown of pests or for improved control of other pests.

# **CUCURBIT VEGETABLES\* - SOIL**

Crops of Crop Group 9: Chayote (fruit), Chinese waxgourd, (Chinese preserving melon), Citron melon, Cuban pumpkin, Cucumber, Gherkin, Gourds (edible, includes hyotan, cucuzza, hechima, Chinese okra), Momordica spp. (includes balsam apple, balsam pear, bitter melon, Chinese cucumber), Muskmelon (hybrids and/or cultivars of Cucumis melo including true cantaloupe, cantaloupe, casaba, Crenshaw melon, golden pershaw melon, honeydew melon, honey balls, mango melon, Persian melon, pineapple melon, Santa Claus melon, snake melon and Winter melon), Pumpkin, Squash (includes summer squash types such as: butterfut squash, calabaza, crookneck squash, Hubbard squash, scallop squash, straightneck squash, vegetable marrow and calabaza, crookneck squash types such as acorn squash and spaghetti squash), Watermelon (includes hybrids and/or varieties of Citrullus lanatus)

| Field Application Instru                                 | uctions             |
|--|---------------------|
| Pests Controlled   | Rate (Fl. Oz./Acre) |
| Aphids, Cucumber beetles, Leafhoppers, Thrips            | 16.0 to 24.0        |
| (Foliage-feeding thrips only), Whiteflies                |                     |
| Pests/Diseases Suppressed                                |                     |
| Bacterial wilt (as vectored by various cucumber          | 16.0 to 24.0        |
| beetles), Leaf silvering resulting from whitefly feeding |                     |

# Restrictions:

- Preharvest Interval (PHI): 21 days
- Maximum Imidacloprid 2F Select allowed per crop season: 24.0 fluid ounces/Acre (0.38 lb. AI/A)

# Applications:

Apply specific dosage of Imidacloprid 2F Select in one of the following methods:

- 1. Chemigation into root-zone through low-pressure drip, trickle, micro-sprinkler or equivalent equipment;
- 2. In-furrow spray directed on or below seed;
- 3. Narrow (2" or less) surface band spray over seed-line during planting incorporated to a depth of 1 to 1-1/2" with sufficient irrigation within 24 hours of application;
- 4. Narrow band spray directly below eventual seed row in bedding operation 14 or fewer days before planting;
- 5. Post-seeding drench, transplant-water drench or hill drench;
- 6. Subsurface side-dress on both sides of each row. Imidacloprid 2F Select must be incorporated into root-zone.

\*Not for use on crops grown for seed unless allowed by state-specific 24(c) labeling.

| Planthouse Application Instructions <sup>1</sup> |                             |
|--|-----------------------------|
| Pests Controlled                                 | Rate (Fl. Oz./1,000 plants) |
| Aphids, Whiteflies                               | 0.1                         |

#### Restrictions:

- Maximum amount applied in the planthouse: 0.1 fluid ounce (0.00156 lb. Al)/1,000 plants.
- Maximum number of applications in planthouse: 1

## Applications:

Apply specified dosage to seedlings in trays in the planthouse, targeting soil media (tray drench), not more than 7 days prior to transplanting, in one of the following manners:

- 1. Uniform, broadcast high-volume foliar spray, followed immediately by sufficient overhead irrigation to wash Imidacloprid 2F Select from foliage into potting media without loss of gravitational liquid from the bottom of the tray. Failure to wash Imidacloprid 2F Select from foliage may result in reduced pest control;
- 2. Injection into overhead irrigation system, using adequate volume to thoroughly saturate soil media without loss of gravitational solution from the bottom of the tray.

The application made in the planthouse will only provide short-term protection and is not intended as a substitution for a field application. An additional field application must be made within 2 weeks following transplanting to provide continuous protection. Applications of higher rates or increased number of applications in planthouse may result in significant plant injury. Transplants should be handled carefully during setting to avoid dislodging treated potting media from roots.

**Important Notes**: Not all varieties of fruiting vegetables have been tested for tolerance to Imidacloprid 2F Select applied to seedling flats. It is therefore recommended to treat a small number of plants and confirm tolerance for 7 days prior to treating entire planthouse.

<sup>1</sup>Not for use in California unless permitted by state specific 24(c) labeling.

# GREENHOUSE VEGETABLES\* - SOIL cucumber and tomato ONLY

| Pests Controlled   | Rate (Fl. Oz./1,000 plants) |      |
|--------------------|-----------------------------|------|
| Aphids, Whiteflies | 1.4                         | (((( |
| Destrictions       |                             |      |

#### Restrictions:

- Pre-Harvest Interval (PHI): 0 days
- Maximum number Imidacloprid 2F Select applications per crop season: 1

# **Applications:**

Apply specified dosage in a minimum of 16 gallons of water for tomatoes and 21 gallons of water for cucumbers using soil drenches, micro-irrigation, drip irrigation, or hand-held or motorized calibrated irrigation equipment.

**DO NOT** apply to immature plants since phytotoxicity may occur.

Important Notes: Applications should be made when infestation pressure surpasses threshold and beneficials are not able to maintain pest populations below damage thresholds. Repellency of bumble bee pollinators and negative effects on some beneficials (Onus sp.) can occur when Imidacloprid 2F Select is applied.

Apply only to plants grown in field-type soils, potting media, or mixtures, thereof. Do not apply to plants grown in non-soil media such as perlite, vermiculite, rock wool or other soil-less media, or plants grown hydroponically.

Many varieties of vegetables have been tested for tolerance to Imidacloprid 2F Select and show good safety. However, certain varieties may show more sensitivity to Imidacloprid 2F Select. Therefore, treatment of a few plants is recommended before treating the whole greenhouse.

\*Not for use on crops grown for seed unless allowed by state-specific 24(c) labeling.

#### FRUITING VEGETABLES - SOIL\*

Crops of Crop Group 8 plus Okra including: Eggplant, Ground Cherry, Okra, Pepper (Including Bell, Chili, Cooking, Pimentos and Sweet), Tomato, Pepinos, Tomatillo

| Field Application Instructions                               |                               |
|--|-------------------------------|
| Pests Controlled   | Rate (Fl. Oz./Acre)           |
| Aphids, Colorado potato beetle, Flea beetles, Leafhoppers,   | Okra and Pepper: 16.0 to 32.0 |
| Thrips (foliage-feeding thrips only), Whiteflies             | Other Crops: 16.0 to 24.0     |
| Pests/Diseases Suppressed                                    |                               |
| Symptoms of: Tomato mottle virus, Tomato spotted wilt virus, | Okra and Pepper: 16.0 to 32.0 |
| Tomato yellow leaf curl virus                                | Other Crops: 16.0 to 24.0     |

#### Restrictions:

- Pre-Harvest Interval (PHI): 21 days
- Maximum Imidacloprid 2F Select allowed on pepper and okra crops per crop season: 32.0 fluid ounces/Acre (0.50 lb. Al/A)
- Maximum Imidacloprid 2F Select allowed on other fruiting vegetable crops per crop season: 24.0 fluid ounces/Acre (0.38 lb. Al/A)

# Applications:

Apply specific dosage of Imidacloprid 2F Select in one of the following methods:

- 1. Chemigation into root-zone through low-pressure drip, trickle, micro-sprinkler or equivalent equipment;
- 2. In-furrow spray directed on or below seed;
- 3. Narrow (2" or less) surface band spray over seed-line during planting incorporated to a depth of 1 to 1-1/2" with sufficient irrigation within 24 hours of application;
- 4. Narrow band spray directly below eventual seed row in bedding operation 14 or fewer days before planting:
- 5. Post-seeding drench, transplant-water drench, or hill drench;
- 6. Subsurface side-dress on both sides of each row. Imidacloprid 2F Select must be incorporated into root-zone.

\*Not for use on crops grown for seed unless allowed by state-specific 24(c) labeling.

| Planthouse Application Instructions <sup>1</sup> |                             |  |
|--|-----------------------------|--|
| Pests Controlled                                 | Rate (Fl. Oz./1,000 plants) |  |
| Aphids , Whiteflies                              | 0.1                         |  |
| Poetrictions                                     |                             |  |

Maximum amount Imidacloprid 2F Select applied in the planthouse: 0.1 fluid ounces (0.00156 lb.

ai)/1,000 plants

Maximum number Imidacloprid 2F Select applications in planthouse: 1

# Applications:

Apply specified dosage to seedlings in trays in the planthouse, targeting soil media (tray drench), not more than 7 days prior to transplanting, in one of the following manners:

- 1. Uniform, broadcast high-volume foliar spray, followed immediately by sufficient overhead irrigation to wash Imidacloprid 2F Select from foliage into potting media without loss of gravitational liquid from the bottom of the tray. Failure to wash Imidacloprid 2F Select from foliage may result in reduced pest control;
- 2. Injection into overhead irrigation system, using adequate volume to thoroughly saturate soil media without loss of gravitational solution from the bottom of the tray.

The application made in the planthouse will only provide short-term protection and is not intended as a substitution for a field application. An additional field application must be made within 2 weeks following transplanting to provide continuous protection. Applications of higher rates or increased number of applications in planthouse may result in significant plant injury and are not permitted. Transplants should be handled carefully during setting to avoid dislodging treated potting media from roots.

**Important Notes**: Not all varieties of fruiting vegetables have been tested for tolerance to Imidacloprid 2F Select applied to seedling flats. It is therefore recommended to treat a small number of plants and confirm tolerance for 7 days prior to treating entire planthouse.

<sup>1</sup>Not permitted in California unless otherwise specified by state-specific 24(c) labeling.

# FRUITING VEGETABLES - FOLIAR\*

Crops of Crop Group 8 plus Okra: Eggplant, Ground Cherry, Okra, Pepper (Including Bell, Chili, Cooking, Pimentos and Sweet), Tomato, Pepinos, Tomatillo

| Pests Controlled                             | Rate (Fl. Oz./Acre) |  |
|--|---------------------|--|
| Aphids, Colorado potato beetle, Leafhoppers, | 3.0 to 5.0          |  |
| Whiteflies                                   |                     |  |
| Pepper weevil                                | 5.0                 |  |

#### Restrictions:

- Pre-Harvest Interval (PHI): 0 days
- Minimum interval between applications: 5 days
- Maximum amount allowed per crop season: 15.4 fluid ounces/Acre (0.24 lb. Al/A)

# Applications:

For pepper weevil, apply specified dosage of Imidacloprid 2F Select by ground equipment only, timing applications prior to a damaging pest population becoming established. Good coverage of foliage and fruit is necessary for optimal control. Applications of Imidacloprid 2F Select must be incorporated into a full-season program, where alternations of effective products from multiple classes of chemistry and different modes of actions are utilized in a blocked or windowed approach. For additional information, please contact your Prime Source, LLC representative, Extension Specialist or crop advisor. Higher listed rate should be used when targeting adult whiteflies.

\*Not for use on crops grown for seed unless allowed by state-specific 24(c) labeling.

#### **GLOBE ARTICHOKE - FOLIAR**

| Pests Controlled  | Rate (Fl. Oz./Acre)                     | 6 (       |
|---|---|-----------|
|   |   | ccřecti   |
| Aphids, Leafhoppers   | 3.2 to 8.0 و` {`{                       |           |
| Restrictions:   | ( ( (                                   | £ € € € € |
| <ul> <li>Pre-Harvest Interval (PHI): 7 days</li> </ul>                    | ί,                                      | ( ( ( ( ( |
| <ul> <li>Minimum interval between applications: 14 days</li> </ul>        | € ( ( ( ( ( ( ( ( ( ( ( ( ( ( ( ( ( ( ( |           |
| <ul> <li>Maximum amount allowed per year: 32.0 fluid ounces/Ac</li> </ul> | re (0.50 lb. Al/A)                      |           |

#### **HERBS - SOIL**

Crops of Crop Subgroup 19A: Angelica, Balm (lemon balm), Basil (fresh and dried), Borage, Burnet,

Chamomile, Catnip, Chervil (dried), Chinese chive, Chive, Clary, Coriander (cilantro or Chinese parsley leaves), Costmary, Cilantro (leaf), Curry (leaf), Dillweed, Horehound, Hyssop, Lavender, Lemongrass, Lovage (leaf), Marigold, Marjoram, Nasturtium, Parsley (dried), Pennyroyal, Rosemary, Rue, Sage, Savory (summer and winter), Sweet bay (bay leaf), Tansy, Tarragon, Thyme, Wintergreen, Woodruff, Wormwood

| Pests Controlled                              | Rate (Fl. Oz./Acre) |
|---|---------------------|
| Aphids, Flea Beetles, Leafhoppers, Whiteflies | 16.0 to 24.0        |
| Pests Suppressed                              |                     |
| Thrips (foliage-feeding thrips only)          | 16.0 to 24.0        |

#### Restrictions:

- Pre-Harvest Interval (PHI): 14 days
- Maximum amount allowed per crop season: 24.0 fluid ounces/Acre (0.38 lb. Al/A)

# **Applications:**

Apply specified dosage in one of the following methods:

- 1. In-furrow spray during planting directed on or below seed;
- 2. In-furrow spray or transplant-water drench during setting or transplanting;
- 3. Shanked-into or below eventual seed-line;
- 4. Chemigation into root zone through low-pressure drip, trickle, micro-sprinkler or equivalent equipment. **Important Notes**: Not all crops and/or varieties listed above have been tested for phytotoxic effects. Without specific knowledge about a particular crop and variety, Prime Source, LLC strongly recommends that only small areas or numbers of plants of each be treated and evaluated prior to commercial use.

#### **HERBS - FOLIAR**

Crops of Crop Subgroup 19A: Angelica, Balm (lemon balm), Basil (fresh and dried), Borage, Burnet, Chamomile, Catnip, Chervil (dried), Chinese chive, Chive, Clary, Coriander (cilantro or Chinese parsley leaves), Costmary, Cilantro (leaf), Curry (loaf), Dillweed, Horehound, Hyssop, Lavender, Lemongrass, Lovage (leaf), Marigold, Marjoram, Nasturtium, Parsley (dried), Pennyroyal, Rosemary, Rue, Sage, Savory (summer and winter), Sweet bay (bay leaf), Tansy, Tarragon, Thyme, Wintergreen, Woodruff, Wormwood

| Pests Controlled                              | Rate (FI. Oz./Acre) |
|---|---------------------|
| Aphids, Flea Beetles, Leafhoppers, Whiteflies | 2.8                 |

# Restrictions:

- Pre-Harvest Interval (PHI): 7 days
- Minimum interval between applications: 5 days
- Maximum amount allowed per crop season: 8.4 fluid ounces/Acre (0.13 lb. Al/A)

Applications: Imidacloprid 2F Select may be applied through properly calibrated ground and aerial application equipment. Thorough coverage with direct contact of the spray material to the target pests is required for continuum control. The addition of an organosilicone-based spray adjuvant at a rate not to exceed the adjuvant manufacturer's use rate may improve coverage and control.

Important Notes: Not all crops and/or varieties listed above have been tested for phytotoxic effects. Without specific knowledge about a particular crop and variety, Prime Source, LLC strongly recommends that only small areas or numbers of plants of each be treated and evaluated prior to commercial use.

HEAD and STEM BRASSICA VEGETABLES and LEAF BRASSICA GREENS, plus TURNIP TOPS - SOIL\*

Crops of Crop Group 5: Broccoli, Broccoli raab (rapini), Brussels sprouts, Cabbage, Cauliflower, Cavalo broccoli, Chinese (bok choy) cabbage, Chinese (napa) cabbage, Chinese mustard (gai Choy) cabbage, Collards, Kale, Kohlrabi, Mizuna, Mustard Greens, Mustard spinach, Rape greens, Turnip tops (leaves) - SEE **RATE TABLE BELOW.** 

#### **LEAFY VEGETABLES - SOIL\***

Crops of Crop Subgroup 4A plus Watercress: amaranth (leafy amaranth, Chinese spinach, tampala), Arugula (Roquette), Chervil, Chrysanthemum (edible leaved and garland), Cilantro, Corn salad, Cress (garden), Cress (upland, yellow rocket, winter cress), Dandelion, Dock (sorrel), Endive (escarole), Lettuce (head and leaf), Orach, Parsley, Purslane (garden and winter), Raddicchio (red chicory), Spinach (including New Zealand and vine (Malabar spinach, Indian spinach), Watercress (commercial production only, applications must not be made to native cress growing in streams or other bodies of water), Watercress (upland) - SEE RATE TABLE BELOW.

Rate Table for Head and Stem Brassica Vegetables and Leaf Brassica Greens, Turnip Tops and Leafy

Vegetables - Soil Application

| Pests Controlled  | Rate (Fl. Oz./Acre) (on 36-inch rows) |
|---|---------------------------------------|
| Aphids, Leafhoppers, Thrips (foliage-feeding thrips only), Whiteflies | 10.0 to 24.0                          |

#### **Restrictions:**

- Pre-Harvest Interval (PHI): 21 days
- Maximum Imidacloprid 2F Select allowed per crop season: 24.0 fluid ounces/Acre (0.38 lb, Al/A)

# Applications:

Apply specified dosage of Imidacloprid 2F Select in one of the following methods:

- 1. Chemigation into root-zone through low-pressure drip, trickle, micro-sprinkler or equivalent equipment;
- 2. In-furrow spray directed on or below seed;
- 3. Narrow (2" or less) surface band spray over seed-line during planting incorporated to a depth of 1 to 1-1/2" with sufficient irrigation within 24 hours of application:
- 4. Narrow band spray directly below eventual seed row in bedding operation 14 or fewer days before planting;
- 5. Post-seeding drench, transplant-water drench or hill drench;
- 6. Subsurface side-dress on both sides of each row. Imidacloprid 2F Select must be incorporated into root-zone.

\*Not for use on crops grown for seed unless allowed by state-specific 24(c) labeling.

# HEAD and STEM BRASSICA VEGETABLES and LEAF BRASSICA GREENS- FOLIAR\*

Crops of Crop Group 5: Broccoli, Broccoli raab (rapini), Brussels sprouts, Cabbage, Cauliflower, Cavalo broccoli, Chinese (bok choy) cabbage, Chinese (napa) cabbage, Chinese mustard (gai Choy) cabbage, Collards, Kale, Kohlrabi, Mizuna, Mustard Greens, Mustard spinach, Rape greens - SEE RATE TABLE BELOW.

# **LEAFY GREENS VEGETABLES\* - FOLIAR**

Crops of Crop Subgroup 4A plus Watercress : amaranth (leafy amaranth, Chinese spinach, tampala), Arugula (Roquette), Chervil, Chrysanthemum (edible leaved and garland), Cilantro, Corn salad, Cress (garden), Ctess 3 (upland, yellow rocket, winter cress), Dandelion, Dock (sorrel), Endive (escarole), Lettuce (head and leaf), comes Orach, Parsley, Purslane (garden and winter), Raddicchio (red chicory), Spinach (including New Zealand and vine (Malabar spinach, Indian spinach), Watercress (commercial production only, applications must not be "C" made to native cress growing in streams or other bodies of water), Watercress (upland) - SEE RATE TABLE BELOW.

Rate Table for Head and Stem Brassica Vegetables, Leaf Brassica Greens, and Leafy Green Vegetables - Foliar Application

| · Olici · · · · · · · · · · · · · · · · · · |                     |
|---|---------------------|
| Pests Controlled                            | Rate (Fl. Oz./Acre) |

| Aphids, Flea beetles, Leafhoppers, Whiteflies | 3.0 |
|---|-----|
| Restrictions:                                 |     |

- Pre-Harvest Interval (PHI): 7 days
- Minimum interval between applications: 5 days
- Maximum amount allowed per crop season: 14.5 fluid ounces/Acre (0.23 lb. Al/A)

# Applications:

For applications made to watercress, production fields must be drained of water at least 24 hours prior to application and water must not be reapplied to the field for a minimum of 24 hours following application. Applications must be made to fully leafed-up canopies only.

\*Not for use on crops grown for seed unless allowed by state-specific 24(c) labeling.

# **LEAF PETIOLES VEGETABLES - SOIL\***

Crops of Crop Subgroup 4B: Cardoon, Celery, Chinese celery (fresh leaves and stalk only), Celtuce, Florence fennel including sweet anise, sweet fennel, Finocchio), Rhubarb, Swiss chard

| Pests Controlled                                    | Rate (Fl. Oz./Acre) |
|---|---------------------|
| Aphids, Leafhoppers, Thrips (foliage-feeding thrips | 10.0 to 24.0        |
| only), Whiteflies                                   |                     |

#### Restrictions:

- Pre-Harvest Interval (PHI): 45 days
- Maximum Imidacloprid 2F Select allowed per crop season: 24.0 fluid ounces/Acre (0.38 lb. Al/A)

# Applications:

Apply specified dosage of Imidacloprid 2F Select in one of the following methods:

- 1. Chemigation into root-zone through low-pressure drip, trickle, micro-sprinkler or equivalent equipment;
- 2.—In-furrow-spray-directed on-or-below seed;
- 3. Narrow (2" or less) surface band spray over seed-line during planting incorporated to a depth of 1 to 1-1/2" with sufficient irrigation within 24 hours of application;
- 4. Narrow band spray directly below eventual seed row in bedding operation 14 or fewer days before planting;
- 5. Post-seeding drench, transplant-water drench or hill drench;
- 6. Subsurface side-dress on both sides of each row. Imidacloprid 2F Select must be incorporated into root-zone.

\*Not for use on crops grown for seed unless allowed by state-specific 24(c) labeling.

# LEGUME VEGETABLES - SOIL1

Crops of Crop Group 6 (except soybean, dry): Edible Podded and Succulent Shelled Pea and Bean and Dried Shelled Pea and Bean, Bean (*Lupinus* spp., includes grain lupin, sweet lupin, white lupin, and white sweet lupin), Bean (*Phaseolus* spp., includes field bean, kidney bean, lima bean, navy bean, pinto bean, runner bean, snap bean, tepary bean, wax bean), Bean (*Vigna* spp., includes adzuki bean, asparagus bean, blackeyed pea, catjang, Chinese longbean, cowpea, Crowder pea, moth bean, mung bean, rice bean, Southern pea, urd bean, yardlong bean), Pea (*Pisum* spp., includes dwarf pea, edible-pod pea, English pea, field pea, garden pea, green pea, snow pea, sugar snap pea), Other Beans and Peas [Broad bean (fava), Chickpea (garbanzo bean), Guar, Jackbean, Lablab bean (Hyacinth bean), Lentil, Pigeon pea, Soybean (immature seed), Sword bean]

| Pests Controlled  | Rate (FI. Oz./Acre) | <u> </u> |
|---|---------------------|----------|
| Aphids, Leafhoppers, Thrips (foliage-feeding thrips only), Whiteflies   | 16.0 to 24.0        | 00000    |
| Pests/Diseases Suppressed   | ( ( (               | <u> </u> |
| Symptoms of: Bean common mosaic virus (BCMV), Bean golden mosaic virus (BGMV), Beet curly top hybrigeminivirus (BCTV) | 16.0 to 24.0        | (((,     |

#### Restrictions:

- Pre-harvest Interval (PHI): 21 days
- Maximum Imidacloprid 2F Select allowed per crop season: 24.0 fluid ounces/Acre (0.38 lb. AI/A)

# Applications:

Apply specified dosage of Imidacloprid 2F Select in one of the following methods:

- 1. Chemigation into root-zone through low-pressure drip, trickle, micro-sprinkler or equivalent equipment;
- 2. In-furrow spray at planting directed on or below seed;
- 3. In a narrow (2" or less) surface band over seed-line during planting incorporated into a depth of 1 to 1-1/2" with sufficient irrigation within 24 hours following application;
- 4. In a narrow band directly below the eventual seed row in a bedding operation 7 or fewer days before planting:
- 5. As a post-seeding drench, transplant drench, or hill drench.

<sup>1</sup>Not for use on crops grown for seed unless allowed by state-specific 24(c) labeling

# LEGUME VEGETABLES - FOLIAR1

Crops of Crop Group 6 (except soybean, dry): Edible Podded and Succulent Shelled Pea and Bean and Dried Shelled Pea and Bean, Bean (Lupinus spp., includes grain lupin, sweet lupin, white lupin, and white sweet lupin), Bean (Phaseolus spp., includes field bean, kidney bean, lima bean, navy bean, pinto bean, runner bean, snap bean, tepary bean, wax bean), Bean (Vigna spp., includes adzuki bean, asparagus bean, blackeyed pea. catjang, Chinese longbean, cowpea, Crowder pea, moth bean, mung bean, rice bean, Southern pea, urd bean, yardlong bean), Pea (Pisum spp., includes dwarf pea, edible-pod pea, English pea, field pea, garden pea. green pea, snow pea, sugar snap pea), Other Beans and Peas [Broad bean (fava), Chickpea (garbanzo bean), Guar, Jackbean, Lablab bean (Hyacinth bean), Lentil, Pigeon pea, Soybean (immature seed), Sword bean]

| Pests Controlled                | Rate (Fl. Oz./Acre) |
|---------------------------------|---------------------|
| Aphids, Leafhoppers, Whiteflies | 2.8                 |
| Restrictions:                   |                     |

- Pre-Harvest Interval (PHI): 7 days
- Minimum interval between applications: 7 days
- Maximum amount allowed per crop season: 8.4 fluid ounces/Acre (0.13 lb. Al/A)

<sup>1</sup>Not for use on crops grown for seed unless allowed by state-specific 24(c) labeling.

# ROOT VEGETABLES - SOIL1

Crops of Crop Subgroup 1B (except sugarbeet): Beet (garden)<sup>2</sup>, Carrot<sup>2</sup>, Burdock (edible)<sup>2</sup>, Celeriac<sup>2</sup>, Chervil (turnip-rooted)<sup>2</sup>, Chicory<sup>2</sup>, Ginseng, Horseradish, Parsley (turnip-rooted), Parsnip<sup>2</sup>, Radish<sup>2</sup>, Oriental radish (diakon)<sup>2</sup>, Rutabaga<sup>2</sup>, Salsify (oyster plant), Salsify (black)<sup>2</sup>, Salsify (Spanish), Skirret, Turnip<sup>2</sup>

| Pests Controlled  | Rate (Fl. Oz./1,000 row-feet) | Rate (Fl. Oz./Acre) |
|---|-------------------------------|---------------------|
| Aphids, Flea beetles, Leafhoppers,<br>Thrips (foliage-feeding thrips only),<br>Whiteflies | 0.7 to 1.7                    | 10.0 to 24.0        |

# Restrictions:

- Pre-Harvest Interval (PHI): 21 days
- Maximum Imidacloprid 2F Select allowed per crop season: 24.0 fluid ounces/Acre (0.38 lbs. Al/A)
- Maximum Imidacloprid 2F Select applications per crop season: 1

#### Applications:

Apply specified dosage of Imidacloprid 2F Select in one of the following methods:

- Chemigation through low-pressure drip, trickle, micro-sprinkler or equivalent equipment;
- 2. In-furrow spray (rate specified per 1,000 row-feet) or shanked-in 1 to 2 inches below seed depth during planting:
- 3. In a narrow (2 inches or less) band directly (1 to 2 inches) below the eventual seed row in a bedding operation 14 or fewer days before planting.

Important Notes: Rate applied affects the length of control. Use a higher rate within the specified rate range where infestations occur later in crop development, or where pest pressure is continuous. Imidacloprid 2F Select rates less than 0.7 fluid ounces/1,000 row-feet will not provide adequate residual pest control. Imidacloprid 2F Select treated crops grown on very high organic matter soils (muck) may also reduire additional pest management control.

Not for use on crops grown for seed unless allowed by state-specific 24(c) labeling.

<sup>2</sup>Tops or greens from these crops may be utilized for food or feed.

# TUBEROUS AND CORM VEGETABLES - SOIL1

Crops of Crop Subgroup 1C: Arracacha, Arrowroot, Artichoke (Chinese and Jerusalem), Canna (edible, Queensland arrowroot), Casava (bitter and sweet)<sup>2</sup>, Chayote (root), Chufa, Dasheen (taro)<sup>2</sup>, Ginger, Leren, Sweet potato, Tanier (cocoyam)<sup>2</sup>, Tumeric, Yam bean (jicama, manioc pea), Yam (true)<sup>2</sup>

(For applications on potato see "Field Crop" section for Potato - Soil)

| Pests Controlled  | Rate (Fl. Oz./1,000 row-feet) | Rate (Fl. Oz./Acre) |
|---|-------------------------------|---------------------|
| Aphids, Flea beetles, Leafhoppers,<br>Thrips (foliage-feeding thrips only),<br>Whiteflies | 0.7 to 1.7                    | 10.0 to 24.0        |

### Restrictions:

- Pre-Harvest Interval (PHI) from planting application: 3 days (leaves); 125 days (corms)
- Maximum Imidacloprid 2F Select allowed per crop season: 24.0 fluid ounces/Acre (0.38 lbs. Al/A)
- Maximum Imidacloprid 2F Select applications per crop season: 1

# Applications:

Apply specified dosage of Imidacloprid 2F Select in one of the following methods:

- 1. In-furrow spray (rate specified per 1,000 row-feet) over planting material (hulis) or shanked-in 1 to 2 inches below hulis depth at planting;
- 2. Side-dress not more than 0.6 fluid ounces/1,000 row-feet no later than 45 days after-planting. Observe same PHI as above.

Important Notes: Rate applied affects the length of control. Use a higher rate within the specified rate range where infestations occur later in crop development, or where pest pressure is heavy or continuous.

Imidacloprid 2F Select rates less than 0.7 fluid ounces/1,000 row-feet will not provide adequate residual pest control. Imidacloprid 2F Select treated crops grown on very high organic matter soils (muck) may also require additional pest management control.

<sup>1</sup>Not for use on crops grown for seed unless allowed by state-specific 24(c) labeling.

<sup>2</sup>Tops or greens from these crops may be utilized for food or feed.

# ROOT, TUBEROUS and CORM VEGETABLES - FOLIAR1

Crops of Crop Group 1C (except for sugarbeet): Arracacha, Arrowroot, Artichoke (Chinese and Jerusalem), Beet (garden)<sup>2</sup>, Burdock (edible)<sup>2</sup>, Canna (edible, Queensland arrowroot), Carrot<sup>2</sup>, Cassava (bitter & sweet)<sup>2</sup>, Celeriac<sup>2</sup>, Chayote (root), Chervil (turnip-rooted)<sup>2</sup>, Chicory<sup>2</sup>, Chufa, Dasheen (taro)<sup>2</sup>, Ginger, Ginseng, Horseradish, Leren, Parsley (turnip-rooted), Parsnip<sup>2</sup>, Radish<sup>2</sup>, Oriental radish (daikon)<sup>2</sup>, Rutabaga<sup>2</sup>, Salsify (black)<sup>2</sup>, Salsify (oyster plant), Salsify (Spanish), Skirret, Sweet potato, Tanier (cocoyam)<sup>2</sup>, Turmeric, Turnip<sup>2</sup>, Yam bean (jicama, manoic pea), Yam (true)<sup>2</sup>

(For applications on potato see Field Crops section for Potato - Foliar)

| Pests Controlled                              | Rate (Fl. Oz./Acre) |
|---|---------------------|
| Aphids, Flea beetles, Leafhoppers, Whiteflies | 2.8                 |

# Restrictions:

- Pre-Harvest Interval (PHI): 7 days
- Minimum interval between applications: 5 days
- Maximum amount allowed per crop season: 2.8 fluid ounces/Acre (0.044 lb. Al/A) on radish; 8.4 fluid ounces/Acre (0.13 lb. Al/A) on other crops
- Maximum applications of Imidacloprid 2F Select per crop season: 1 on radish; 3 on other crops.

<sup>1</sup>Not for use on crops grown for seed unless allowed by state-specific 24(c) labeling.

<sup>2</sup>Tops or greens from these crops may be utilized for food or feed.

#### STRAWBERRY - SOIL

| STRAVVBERRY - SOIL |                     |
|--------------------|---------------------|
| Annual an          | d perennial crops   |
| Pests Controlled   | Rate (FI. oz./Acre) |

| Aphids, Whiteflies | 24.0 to 32.0 |
|--------------------|--------------|
| Restrictions:      |              |

- Pre-Harvest Interval (PHI): 14 days
- Maximum Imidacloprid 2F Select allowed per year: 32.0 fluid ounces/Acre (0.50 lb. AI/A)
- Do not use both soil application methods on the same crop in the same season.

# Applications:

Apply specified dosage of Imidacloprid 2F Select in one of the following methods:

- 1. Chemigation into root-zone through low pressure drip, trickle, micro-sprinkler or equivalent equipment after plants are established or on perennial crops in early spring prior to bud opening;
- 2. As a plant material or plant hole treatment just prior to, or during transplant;
- 3. As a band spray over the row in a minimum of 20 gallons of water per acre, followed immediately by overhead irrigation to incorporate product into root zone. DO NOT use plastic or other mulch that limits movement of Imidacloprid 2F Select into root zone.

The rate applied affects the length of control. Use a higher rate within the specified rate range where infestations may occur later in crop development or where pest pressure is continuous. <sup>1</sup>Not for use on crops grown for seed unless allowed by state-specific 24(c) labeling.

| Strawberry - Post-Harvest Use on Perennial Crops    |                     |  |
|---|---------------------|--|
| Pests Controlled                                    | Rate (Fl. Oz./Acre) |  |
| White grub complex (grubs of Asiatic garden beetle, |                     |  |
| European and Masked Chafer, Japanese beetle,        | 16.0 to 24.0        |  |
| Oriental beetle)                                    |                     |  |

#### Restrictions:

- Pre-Harvest Interval (PHI): 14 days
- Maximum Imidacloprid 2F Select allowed per year: 24.0 fluid ounces/Acre (0.38 lb. Al/A)
- Do not use both soil application methods on the same crop in the same season

## **Applications:**

Apply a single application post-harvest to coincide with renovation of strawberry fields and during active egg-laying period of beetles. Apply specified dosage of Imidacloprid 2F Select in one of the following methods:

- 1. As a ground spray via boom or backpack sprayer in a minimum of 20 gallons of water per acre;
- 2. As a row-band spray using an adjusted amount of product based on the treated row band area in proportion to the amount required per full acre. The bandwidth should be equivalent to the width of the anticipated fruiting bed;
- 3. As a chemigation application with 600 to 1,000 gallons of water followed by 0.10 to 0.25 inch irrigation. Important: Follow all soil-surface applications with 0.25 inch of rainfall or overhead irrigation water per acre within 2 hours of application. Failure to adequately incorporate Imidacloprid 2F Select into egg-deposition zone may result in decreased activity.

<sup>1</sup>Not for use on crops grown for seed unless allowed by state-specific 24(c) labeling.

# STDAMBEDDY . FOLIAD

| STRAVBLIRET - TOLIAR            |                     |
|---------------------------------|---------------------|
| Pests Controlled                | Rate (Fl. Oz./Acre) |
| Aphids, Spittlebugs, Whiteflies | 3.0                 |
| Postrictions:                   | ( ( (               |

- Pre-Harvest Interval (PHI): 7 days
- Minimum interval between applications: 5 days
- Maximum amount allowed per year: 9.1 fluid ounces/Acre (0.14 lb. Al/A)
- DO NOT apply during bloom or within 10 days prior to bloom or when bees are foraging

# SUGARBEET<sup>1</sup> – SOIL (For use only in CA)

| Pests Controlled  | Rate (Fl. Oz./Acre) |
|---|---------------------|
| Aphids, Leafhoppers, Whiteflies, Flea beetles                       | 6.0 to 12.0         |
| Pests/Diseases Suppressed   |                     |
| Symptoms of: Western yellows/Beet curly top hybrigeminivirus (BCTV) | 6.0 to 12.0         |

#### Restrictions:

- Maximum Imidacloprid 2F Select allowed per year: 12.0 fluid ounces/Acre (0.18 lb. AI/A)
- Maximum imidacloprid allowed per year: 0.18 lb. ai/acre (from any formulation) on any row spacing
- DO NOT apply immediately prior to bud opening or during bloom or when bees are foraging.

# Applications:

Apply specified dosage of Imidacloprid 2F Select in the following method:

Apply specified dosage in sufficient carrier volume to insure uniform application. Apply directly below each seed furrow either during the bedding operation immediately prior to planting or at the time of planting.

**Important**: The lower listed rate may be applied to aid establishment of stands in whitefly areas, or for early season control of other pests listed.

<sup>1</sup>Not for use on crops grown for seed unless allowed by state-specific 24(c) labeling.

# TREE, VINE AND FRUIT CROPS APPLICATION INSTRUCTIONS

# **Application Instructions - For Foliar Applications Only**

Apply specified rate per acre as a broadcast or directed foliar spray as pest populations begin to build. Thorough uniform coverage is necessary to achieve optimal control. A spray adjuvant may be used to improve coverage. Imidacloprid 2F Select may not knock down established and heavy insect populations. Two applications may be required to achieve control. Scout fields and retreat if needed. Imidacloprid 2F Select may be tank mixed with other insecticides for knockdown of pests or for improved control of other pests. Aerial application of Imidacloprid 2F Select may result in slower activity and reduced control relative to results from ground application. For trees and vine crops, application rates are based on full size, mature trees or vines.

# **BANANA and PLANTAIN - SOIL**

| Pests Controlled          | Rate (Fl. oz./Acre) |  |
|---------------------------|---------------------|--|
| Aphids, Leafhoppers       | 16.0 to 32.0        |  |
| Pests/Diseases Suppressed |                     |  |
| Scales                    | 16.0 to 32.0        |  |

### Restrictions:

- Pre-Harvest Interval (PHI): 0 day
- Maximum amount allowed per year: 32.0 fluid ounces/ Acre (0.5 lb. Al/A)

# **Applications:**

Apply specified dosage of Imidacloprid 2F Select in the following method:

Minimum interval between applications: 14 days

Chemigation into root zone through low-pressure drip, trickle, micro-sprinkler or equivalent equipment

BANANA and PLANTAIN - FOLIAR

| Pests Controlled                                      | <br>Rate (Fl. Oz./Acre) |
|---|-------------------------|
| Aphids, Leafhoppers, Thrips                           | 6.4                     |
| Restrictions:   | ( (, ( (                |
| <ul> <li>Pre-Harvest Interval (PHI): 0 day</li> </ul> | ( ( (                   |

Maximum amount allowed per year: 32.0 fluid ounces/Acre (0.5 lb. Al/A)

# Applications:

Apply specified dosage of Imidacloprid 2F Select as a broadcast or directed spray to infested area insuring thorough coverage. Imidacloprid 2F Select may be applied through properly calibrated ground or aerial application equipment. Aerial application of Imidacloprid 2F Select may result in slower activity and reduced control relative to results from ground application.

**Important**: Addition of an organosilicone adjuvant at a rate not to exceed 2.0 fluid ounces/100 gallons finished spray solution may improve coverage and pest control.

## **BUSHBERRY - SOIL**

Crops of Crop Subgroup 13B including: Blueberry, Currant, Elderberry, Gooseberry, Huckleberry,

Juneberry, Lingonberry, Salal

| Pests Controlled                                    | Rate (Fl. Oz./Acre) |  |
|---|---------------------|--|
| Japanese beetle (adults, feeding on foliage),       | 16.0 to 32.0        |  |
| White grub complex (grubs of Asiatic garden beetle, |                     |  |
| European and Masked chafer, Japanese beetle and     |                     |  |
| Oriental beetle)                                    | •                   |  |

# Restrictions:

- Pre-Harvest Interval (PHI): 7 days
- Maximum amount allowed per year: 32.0 fluid ounces/Acre (0.50 lb. Al/Acre)
- DO NOT apply pre-bloom or during bloom or when bees are foraging.

# Applications:

Apply specified dosage of Imidacloprid 2F Select in one of the following methods:

- 1. Chemigation into root zone through low-pressure drip, trickle, micro-sprinkler or equivalent equipment;
- 2. 18-inch band on each side of the row followed with 0.25 inch of irrigation immediately after application.

For optimal grub control, apply Imidacloprid 2F Select to control 1st or 2nd instar larvae. Application may be made post-bloom up to 7 days prior to harvest, or post-harvest until October 1st. For optimum control of Japanese beetle larvae, make applications from June 1 to July 15. **DO NOT** apply during bloom.

Application to grass covered rows, row middles, drive lanes, headlands, and other grassy areas in and around the berry field will control resident grub populations. Applications directed to the root zone will help protect berry plant roots from grub feeding.

Apply Imidacloprid 2F Select to moist soil. If necessary, apply one hour of irrigation water immediately before application. To ensure maximum efficacy, 0.5 to 1 inch of irrigation water or rainfall should be applied or received within 24 hours of application of Imidacloprid 2F Select to facilitate movement into the soil and into the root zone.

#### **BUSHBERRY - FOLIAR**

Crops of Crop Subgroup 13B including: Blueberry, Currant, Elderberry, Gooseberry, Huckleberry,

Juneberry Lingonberry Salal

| Pests Controlled                                    | Rate (Fl. Oz./Acre) |
|---|---------------------|
| Aphids, Leafhoppers/Sharpshooters                   | 2.4 to 3.2          |
| Blueberry maggot, Japanese beetles (adults), Thrips | 4.8 to 6.4          |
| (foliage-feeding thrips only)                       |                     |

#### Restrictions:

- Pre-Harvest Interval (PHI): 3 days
- Minimum interval between applications: 7 days
- Maximum amount allowed per year: 32.0 fluid ounces/Acre (0.5 lb. Al/A)

- Maximum number of applications of Imidacloprid 2F Select per year: 5
- Maximum application volume (water): 20.0 GPA ground; 5.0 GPA aerial
- DO NOT apply pre-bloom or during bloom or when bees are foraging.

# **CANEBERRY - SOIL (For Use Only in CA)**

Crops of Crop Subgroup 13A including: Blackberry (*Rubus eubatus*, including bingleberry, black satin berry, boysenberry, Cherokee blackberry, Chesterberry, Cheyenne blackberry, coryberry, darrowberry, dewberry, Dirksen thornless berry, Himalayaberry, hullberry, Lavacaberry, Loganberry, lowberry, Lucretiaberry, mammoth blackberry, marionberry, nectarberry, olallieberry, Oregon evergreen berry, phenomenalberry, rangeberry, ravenberry, rossberry, Shawnee blackberry, youngberry, and varieties and/or hybrids of these), Raspberry (black and red, *Rubus occidentalis*, *Rubus strigosus*, *Rubus idaeus*).

| Pests Controlled                     | Rate (Fl. Oz./Acre) |  |
|--------------------------------------|---------------------|--|
| Aphids, Leafhoppers, Whiteflies      | 16.0 to 32.0        |  |
| Rednecked cane borer                 | 24.0 to 32.0        |  |
| Pests / Diseases Suppressed          |                     |  |
| Thrips (foliage-feeding thrips only) | 16.0 to 32.0        |  |

#### Restrictions:

- Pre-Harvest Interval (PHI): 7 days
- Maximum amount allowed per year: 32.0 fluid ounces/Acre (0.5 lb. Al/A)
- DO NOT apply pre-bloom or during bloom or when bees are foraging.

# **Applications:**

Apply-specified-dosage in one-of-the-following-methods:

- 1) Chemigation into root zone through low-pressure drip, trickle, micro-sprinkler or equivalent equipment.
- 2) Basal, soil drench in a minimum of 500 gallons solution per acre.

# CITRUS - SOIL (Nursery and Greenhouse Container Stock)

**Crops of Crop Group 10 including:** calamondin, citrus citron, Citrus hybrids (includes chironja, tangelo, and tangor), Grapefruit, Kumquat, Lemon, Lime, Mandarin (tangerine), Pummelo, Orange (sweet and sour), Tangelo, Satsuma mandarin, and other cultivars and/or hybrids of these.

| Pests Controlled   | Rate (MI/Ft <sup>3</sup> container media) |
|--|---|
| Aphids, Asian citrus psyllid, Black fly, Citrus leafminer, | 0.75                                      |
| Leafhoppers/Sharpshooters, Mealybugs, Scales, Whiteflies   |   |
| Citrus root weevil (larval complex)                        | 1.25 to 2.50                              |
| Pests / Diseases Suppressed                                |   |
| Citrus thrips (foliage-feeding thrips only)                | 2.50                                      |

Applications: Determine volume of container and calculate dosage necessary to treat container. Apply calculated dosage of Imidacloprid 2F Select per container as a soil drench or through low-pressure drip or trickle irrigation water, through injection into the overhead irrigation system, or as a broadcast high volume spray. With overhead irrigation or broadcast spray, use additional irrigation to wash the product from the foliage into the potting medium. Use sufficient carrier volume to ensure thorough uniform distribution throughout the media without loss of gravitational water from the container. For optimal results, make treatment at planting prior to insect infestation. Retreat if necessary. For control of larvae of the citrus root weevil complex, make application prior to neonate larvae entering potting media. Utilize higher listed dosage for heavy infestations.

# CITRUS - SOIL (Field)

Crops of Crop Group 10, including: calamondin, citrus citron, Citrus hybrids (includes chironja tangelo, and tanger), Grapefruit, Kumquat, Lemon, Lime, Mandarin (tangerine), Pummelo, Orange (sweet and sour), Tangelo, Satsuma mandarin, and other cultivars and/or hybrids of these.

| Pests Controlled   | Rate (Fl. Oz./Acre) |
|--|---------------------|
| Aphids, Asian citrus psyllid, Black fly, Citrus leafminer,                       | 16.0 to 32.0        |
| Leafhoppers/Sharpshooters, Mealybugs, Scales, Termites (FL only), Whiteflies     |                     |
| Pests / Diseases Suppressed  |                     |
| Citrus nematode  | 32.0                |
| Symptoms of: Citrus tristeza virus (CTV) through vector control, Citrus yellows, |                     |
| Thrips (foliage-feeding thrips only)   |                     |

#### Restrictions:

- Pre-Harvest Interval (PHI): 0 days
- Maximum Imidacloprid 2F Select allowed per year: 32.0 fluid ounces/Acre (0.50 lb. Al/A)

Applications: Apply specified dosage of Imidacloprid 2F Select in one of the following methods:

- 1. Chemigation into root-zone through low-pressure drip, tickle, micro-sprinkler or equivalent equipment. For optimum results, apply to newly planted trees or those previously trained to drip, trickle or micro-sprinkler irrigation. Soil should be lightly prewetted to break soil surface tension prior to applications of Imidacloprid 2F Select. Chemigation application can be made separate to normal irrigation but followed by 10 to 20 minutes of additional watering to move Imidacloprid 2F Select into root-zone. Allow 24 hours before initiating subsequent irrigations;
- 2. Soil surface band spray on both sides of the tree. Bands should overlap at the tree base to create a continuous band within the drip-line area of the tree, to be followed immediately with light sprinkler irrigation sufficient to move the product into the upper portion of the root-zone. This method is suitable for very coarse soils with 0.75% organic matter or less;
- 4. For control of existing termite infestations, apply specified dosage in 1 to 4 quarts of total solution volume, depending on size of tree, as a drench application to the basal portion of the tree trunk and surrounding soil in the immediate vicinity of the tree trunk;
- 5. For suppression of citrus nematode, apply specific dosage through low pressure chemigation or soil surface spray only, ensuring complete coverage of the root system and utilizing application directions stated above for the respective application method. Repeated and regular use of Imidacloprid 2F Select over several consecutive growing seasons provides the greatest degree of nematode suppression and yields the greatest plant response.

# CITRUS - FOLIAR

**Crops of Crop Group 10, including:** calamondin, citrus citron, Citrus hybrids (includes chironja, tangelo, and tangor), Grapefruit, Kumquat, Lemon, Lime, Mandarin (tangerine), Pummelo, Orange (sweet and sour), Tangelo, Satsuma mandarin, and other cultivars and/or hybrids of these.

| Pests Controlled                         | Rate (Fl. Oz./100 gallons) | Rate (Fl. Oz./Acre)             |
|--|----------------------------|---------------------------------|
| Aphids, Asian citrus psyllid, Black fly, | 2.8 to 4.0                 | 8.0 to 16.0                     |
| Leafhoppers/Sharpshooters, Leafminers,   | (for dilute applications)  | (depending on tree size, target |
| Mealybugs, Scales, Whiteflies            |                            | pest and infestation pressure)  |
| Pests Suppressed                         |                            | (((                             |
| Thrips (foliage-feeding thrips only)     | 2.8 to 4.0                 | 8.0 to 16.0                     |

#### Restrictions:

- Pre-Harvest Interval (PHI): 0 days
- Minimum interval between applications: 10 days
- Maximum amount allowed per year: 32.0 fluid ounces/Acre (0.5 lb. Al/A)
- DO NOT apply during bloom or within 10 days prior to bloom or when bees are foraging.

# Applications:

Apply specific dosage of Imidacloprid 2F Select as a broadcast or directed spray to infested area ensuring thorough coverage. Imidacloprid 2F Select may be applied through properly calibrated ground or aerial equipment. Aerial application of Imidacloprid 2F Select may result in slower activity and reduced control compared to results from ground application.

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Notification - NY specific language - Ornamentals

Scales - time applications to the crawler stage. Treat each generation.

Where concentrated applications are appropriate, increase the spray solution concentration to apply an equivalent rate per acre to that applied in the diluted application. The 20.0 fluid ounce/Acre rate is based on full sized trees. This rate may be reduced proportionally for smaller trees.

## COFFEE-SOIL

| Pests Controlled               | Rate (Fl. Oz./Acre) |  |
|--------------------------------|---------------------|--|
| Aphids, Leafhoppers, Leafminer | 16.0 to 32.0        |  |
| Pests Suppressed               |                     |  |
| Scales                         | 16.0 to 32.0        |  |

#### Restrictions:

- Pre-Harvest Interval (PHI): 7 days
- Maximum amount allowed per year: 32.0 fluid ounces/Acre (0.5 lb. Al/Acre)
- DO NOT apply pre-bloom or during bloom or when bees are foraging.

# Applications: Apply specified dosage in one of the following methods:

- 1. Chemigation into root zone through low-pressure drip, trickle, micro-sprinkler or equivalent equipment;
- 2. Subsurface side-dress shanked into the root zone on both sides of the plants followed by irrigation;
- 3. Basal, soil drench in sufficient water to insure incorporation into the root zone followed by irrigation.

# **COFFEE - FOLIAR**

| Pests Controlled               | Rate (Fl. oz./Acre) |
|--------------------------------|---------------------|
| Aphids, Leafhoppers, Leafminer | 6.4                 |
| Pests Suppressed               |                     |
|                                |                     |
| Scales                         | 6.4                 |

# Restrictions:

- Pre-Harvest Interval (PHI): 7 days
- Minimum interval between applications: 7 days
- Maximum amount allowed per year: 32.0 fluid ounces/ Acre (0.5 lb. Al/A)
- DO NOT apply pre-bloom or during bloom or when bees are foraging.

# Applications:

Apply specified dosage of Imidacloprid 2F Select as a broadcast or directed spray to infested area insuring thorough coverage. Imidacloprid 2F Select may be applied through properly calibrated ground or aerial application equipment. Aerial application of Imidacloprid 2F Select may result in slower activity and reduced control relative to results from ground application.

#### CRANBERRY - SOIL

| CITAINDERINI - OOIL       |                     |
|---------------------------|---------------------|
| Pests Controlled          | Rate (Fl. Oz./Acre) |
| Rootgrubs (Scarabaeidae), | 16.0 to 32.0        |
| Rootworms (Chrysomelidae) | · <b>,</b> ,        |

#### Restrictions:

- Pre-Harvest Interval (PHI): 30 days
- Maximum amount allowed per year: 32.0 fluid ounces/Acre (0.50 lb. Al/A)
- DO NOT apply pre-bloom or during bloom or when bees are foraging.

# Applications:

Apply Imidacloprid 2F Select to moist soil. Apply specified dosage of Imidacloprid 2F Select in one of the following methods:

1. As a soil spray (ground application) directed to the root and crown area using a minimum of 20 gal of

water per acre;

2. As a chemigation application with 600 to 1,000 gallons water.

Immediately upon application, Imidacloprid 2F Select must be incorporated into root zone by 0.1 to 0.3 inch water/Acre, either with the chemigation application or through irrigation/rainfall if not applied through chemigation. Inadequate incorporation within 24 hours of application may result in reduced control.

**Important**: Best control can be achieved by applying post-bloom (after bees removed) to coincide with the early instar larvae stage.

Imidacloprid 2F Select has not been tested for crop response in tank mixes with other registered fungicides or insecticides. If tank mixing is desired, premix a sample of the Imidacloprid 2F Select and the desired fungicide or insecticide partner at labeled rates and apply to a small area. Evaluate crop response with 48 hours and for at least two weeks prior to utilizing the tank mix on larger acreage. If crop injury results from the premix test, do not apply the tank mix to larger acreage.

## **GRAPE - SOIL**

American bunch grape. Muscadine grape, and Vinifera grape

| Pests Controlled                                    | Rate (Fl. Oz./Acre) |
|---|---------------------|
| European fruit lecanium, Mealybugs,                 | 16.0 to 32.0        |
| Leafhoppers/Sharpshooters, <i>Phylloxera</i> * spp. |                     |
| Pests / Diseases Suppressed                         |                     |
| Grapeleaf skeletonizer, Nematodes, Pierce's Disease | 24.0 to 32.0        |

#### Restrictions:

- Pre-Harvest Interval (PHI): 30 days
- •-Maximum-Imidacloprid 2F Select allowed-per-year: 32.0 fluid ounces/Acre (0.50 lb. Al/A)

# Applications:

Apply specified dosage of Imidacloprid 2F Select in one of the following methods:

- 1. Chemigation into root-zone through low-pressure drip, trickle, micro-sprinkler or equivalent equipment;
- 2. Subsurface side-dress shanked into the root-zone on both sides of the plants followed by irrigation:
- 3. Hill drench in sufficient water to insure incorporation into the root-zone followed by irrigation;
- 4. For suppression of nematodes, apply 32 fluid ounces in a single application or two 16 fluid ounce applications on a 30- to 45-day interval. Treatments should be made only by 1) chemigation into root zone through above ground low pressure drip, trickle, micro sprinkler or equivalent equipment or 2) French plow technique, followed immediately by sufficient irrigation to move the product into the entire root zone of the plant. Repeated and regular use of Imidacloprid 2F Select over several consecutive growing seasons provides the greatest degree of nematode suppression and yields the greatest plant response.

Important: For optimum results, make applications between bud-break and the pea-berry stage.

- 5. Under the following conditions, use 32.0 fluid ounces:
  - a. Where vigorous vine growth is expected;
  - b. In warmer growing areas;
  - c. Where mealybug and European fruit lecanium populations are expected to be heavy;
  - d. Where vine populations exceed 600 per acre; or
  - e. For suppression of nematodes.
    - Repeated and regular use of Imidacloprid 2F Select over several, consecutive growing seasons controls existing *Phylloxera* infestations over time or prevents *Phylloxera* from becoming established.

#### **GRAPE - FOLIAR**

American bunch grape, Muscadine grape, and Vinifera grape

| Pests Controlled                     | Rate (Fl. Oz./Acre) |
|--------------------------------------|---------------------|
| Mealybugs, Leafhoppers/Sharpshooters | 2.4 to 3.2          |
| Grapeleaf skeletonizer               | 3.0 to 3.2          |

#### Restrictions:

- Pre-Harvest Interval (PHI): 0 days
- Minimum interval between applications: 14 days
- Maximum amount allowed per year: 6.4 fluid ounces/Acre (0.1 lb. Al/A)

# Applications:

Apply specific dosage of Imidacloprid 2F Select as a broadcast or directed spray to infested area ensuring thorough coverage. Imidacloprid 2F Select may be applied through properly calibrated ground or aerial equipment.

# HOPS1 - SOIL

| Pests Controlled | Rate (Fl. Oz./Acre) |
|------------------|---------------------|
| Aphids           | 19.2                |

#### Restrictions:

- Pre-Harvest Interval (PHI): 60 days
- Maximum Imidacloprid 2F Select allowed per year: 19.2 fluid ounces/Acre (0.30 lb. AI/A)

# Applications:

Apply specified dosage of Imidacloprid 2F Select in one of the following methods:

- 1. Chemigation into root-zone through low-pressure drip, trickle, micro-sprinkler or equivalent equipment;
- 2. Subsurface side-dress shanked into the root-zone on both sides of the plants followed by irrigation;
- 3. Hill drench in sufficient water to insure incorporation into the root-zone followed by irrigation.

Use higher listed dosages where extended residual control is desired or for treating larger vines or vines with dense foliage volume.

<sup>1</sup>Use not permitted in California unless otherwise directed by state-specific 24(c) labeling.

#### HOPS - FOLIAR

| Pests Controlled                                   | Rate (Fl. Oz./Acre) |  |
|--|---------------------|--|
| Aphids (including woolly apple aphid), Leafhoppers | 6.4                 |  |
| Postrictions:                                      |                     |  |

#### Restrictions:

- Pre-Harvest Interval (PHI): 28 days
- Minimum interval between applications: 21 days
- Maximum amount allowed per year: 19.2 fluid ounces/Acre (0.3 lb. Al/A)

#### POME FRUIT-SOIL

Crops of Crop Group 11 including: Apple, Crabapple, Loquat, Mayhaw, Pear (including Oriental pear), Quince

| Pests Controlled                                   | Rate (Fl. oz./Acre) |
|--|---------------------|
| Aphids (including woolly apple aphid), Leafhoppers | 16.0 to 24.0        |

#### Restrictions:

- Pre-Harvest Interval (PHI): 21 days
- Maximum amount allowed per year: 24.0 fluid ounces/Acre (0.38 lb. Al/A)
- DO NOT apply pre-bloom or during bloom or when bees are foraging.

Applications: Apply specified dosage of Imidacloprid 2F Select in the following method:

 Chemigation into root zone through low-pressure drip, trickle, micro-sprinkler or equivalent equipment.

#### **POME FRUIT - FOLIAR**

Crops of Crop Group 11 including: Apple, Crabapple, Loquat, Mayhaw, Pear (including Oriental pear), Quince

| Pests Controlled                    | Rate (Fl. Oz./100 gallons) | Rate (Fl. Oz:Acre) |
|-------------------------------------|----------------------------|--------------------|
| Leafhoppers                         | 0.8 to 1.6                 | 3.2 to 6.4         |
| Aphids (except woolly apple aphid), | 1.6                        | 6.4                |
| Apple maggot, Leafminers, San Jose  |                            |                    |

| scale                  |     |      |
|------------------------|-----|------|
| FOR PEARS ONLY:        | 4.0 | 16.0 |
| Mealybugs, Pear psylla |     |      |

#### Restrictions:

- Pre-Harvest Interval (PHI): 7 days
- Minimum interval between applications: 10 days
- Maximum Imidacloprid 2F Select allowed per year: 32.0 fluid ounces/Acre (0.50 lb. Al/A)
- DO NOT apply pre-bloom or during bloom or when bees are foraging.

Applications: Applications targeting apple maggot should be combined with manufacturer's specified rate of a sticker.

# POMEGRANATE - SOIL

| Pests Controlled                              | Rate (Fl. Oz./Acre) |  |
|---|---------------------|--|
| Aphids, Leafhoppers/Sharpshooters, Whiteflies | 16.0 to 32.0        |  |

#### Restrictions:

- Pre-Harvest Interval (PHI): 0 days
- Maximum amount allowed per year: 32.0 fluid ounces/Acre (0.5 lb. Al/A)
- DO NOT apply pre-bloom or during bloom or when bees are foraging.

# Application:

Apply specified dosage of Imidacloprid 2F Select in the following method:

Chemigation into root zone through low-pressure drip, trickle, micro-sprinkler or equivalent equipment.

#### POMEGRANATE - FOLIAR

| Pests Controlled                              | Rate (FI. Oz./Acre) |  |
|---|---------------------|--|
| Aphids, Leafhoppers/Sharpshooters, Whiteflies | 6.4                 |  |
| Pests Suppressed                              |                     |  |
| Scales  | 6.4                 |  |

# Restrictions:

- Pre-Harvest Interval (PHI): 7 days
- Minimum interval between applications: 7 days
- Maximum amount allowed per year: 19.2 fluid ounces/Acre (0.3 lb. Al/A)
- DO NOT apply pre-bloom or during bloom or when bees are foraging.

## STONE FRUIT - SOIL

Crops of Crop Group 12 including: apricot, cherry (including sweet and tart), nectarine, peach, plum (including Chickasaw, Damson and Japanese), Plumcot, prune (fresh and dried)

| In-field, Soil Application                              |                     |  |
|---|---------------------|--|
| Pests Controlled  | Rate (Fl. Oz./Acre) |  |
| Aphids (including woolly apple aphid), Leafhoppers      | 16.0 to 24.0        |  |
| Restrictions:   | CCC                 |  |
| <ul> <li>Pre-Harvest Interval (PHI): 21 days</li> </ul> | ( ( (               |  |
| - Maximum amount allowed nor year: 24 0 fluid ounces/Ac | ro (0.39 lb AI/A)   |  |

Maximum amount allowed per year: 24.0 fluid ounces/Acre (0.38 lb. AI/A)

• **DO NOT** apply pre-bloom or during bloom or when bees are foraging.

# Applications:

Apply specified dosage of Imidacloprid 2F Select in the following method:

| hemigation into root zone through low-pressure drip, trickle, micro-sprinkler or equivalent equipment. |  |  |  |
|--|--|--|--|
| Preplant, Root Drip Application  |  |  |  |
| Pests Controlled Rate (Fl. Oz./10 Gallons Root-Dip Solution)   |  |  |  |

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|-------|-------|---------|------------|--------|
| DIACK | peach | aprillu | HIHESHIN   | 100(5) |

2.0

**Important**: Mix Imidacloprid 2F Select at 2.0 fluid ounces per 10 gallons of water. Thoroughly wet bare-root transplant to slightly above the graft union by soaking roots in the Imidacloprid 2F Select solution for up to 5 minutes. Allow solution to dry on roots and transplant trees as soon as possible following treatment.

# STONE FRUIT - FOLIAR

Crops of Crop Group 12 including: apricot, cherry (including sweet and tart), nectarine, peach, plum

(including Chickasaw, Damson and Japanese), Plumcot, prune (fresh and dried)

| Pests Controlled   | Rate (FI. Oz./100<br>gallons) | Rate (Fl. Oz./Acre) |
|--|-------------------------------|---------------------|
| Aphids, Green June beetle, Japanese beetle, Leafhoppers/<br>Sharpshooters, Plant bugs, Rose chafer, San Jose scale | 1.6                           | 3.2 to 6.4          |
| Cherry fruit fly   | 1.6                           | 4.8 to 6.4          |
| Pests Suppressed   |                               |                     |
| Plum curculio, Stink bugs  | 1.6                           | 6.4                 |

# Restrictions for Apricot, Nectarine, Peach:

- Pre-Harvest Interval (PHI): 0 days
- · Minimum interval between applications: 7 days
- Maximum amount allowed per year: 19.2 fluid ounces/Acre (0.30 lb. Al/A)
- Minimum application volume (water): 50 GPA ground application; 25 GPA aerial application
- DO NOT apply pre-bloom or during bloom or when bees are foraging.

# Restrictions for Cherries, Plums, Plumcot, Prune:

- Pre-Harvest Interval (PHI): 7 days
- Minimum interval between applications: 10 days
- Maximum amount allowed per year: 32.0 fluid ounces/Acre (0.50 lb. Al/A)
- Minimum application volume (water): 50 GPA ground application; 25 GPA aerial application
- DO NOT apply pre-bloom or during bloom or when bees are foraging.

#### TREE NUTS -SOIL

Crops of Crop Group 14 (except Almond) Including: Beechnut, Brazil nut, Butternut, Cashew, Chestnut, Chinquapin, Filbert, Hickory nut, Macadamia nut, Pecan, Pistachio, Walnut (black and English)

| Pests Controlled  | Rate (Fl. Oz./Acre) |
|---|---------------------|
| Aphids, Leafhoppers/Sharpshooters, Mealybugs, Spittlebugs, Termites, Whiteflies | 16.0 to 32.0        |
| Pests / Diseases Suppressed   |                     |
| Pecan scab (from reduction in honeydew deposition)                              | 24.0 to 32.0        |
| Thrips (foliage-feeding thrips only)  | 32.0                |

#### Restrictions:

- DO NOT use on Almonds.
- Pre-Harvest Interval (PHI): 7 days
- Maximum amount allowed per year: 32.0 fluid ounces/Acre (0.50 lb. Al/A)
- DO NOT apply pre-bloom or during bloom or when bees are foraging.

Applications: Apply specified dosage prior to or at onset of pest infestation in one of the following methods: ...

1. Chemigation into root zone through low-pressure drip, trickle, micro-sprinkler or equivalent equipment. First wet soil prior to applications of Imidacloprid 2F Select and allow soil to dry following application and prior to subsequent irrigation:

2. Emitter or spot application in a minimum of 4 fluid ounces of mixture per emitter site;

3. Shank or subsurface side-dress, injected to a depth just above or just within the root zone and between the trunk and drip line of the tree canopy. Imidacloprid 2F Select should be applied in a minimum of 10 gallons per acre using multiple shanks on both sides of trees. Ensure Imidacloprid 2F Select placement is below sod or orchard floor debris. Irrigation covering entire treated area should follow within 48 hours to promote

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uptake by root system;

4. For control of termites, apply specified dosage to slightly moist soil as a high-volume drench to the basal portion of the tree trunk and surrounding soil in the immediate vicinity of the tree trunk. Utilize sufficient carrier volume to penetrate the soil to a depth of 18 to 24 inches to obtain optimum control. Allow soil to dry following treatment and prior to applying any irrigation.

Use the higher rates within the specified rate range when applied by shank or subsurface side-dress, used on larger trees, soils with high clay content, for high plant populations, and/or where extended control is desired. **Important**: Under some conditions, control may not occur for 14 or more days or until two (2) irrigations have been made. Applications made later in the season may result in reduced efficacy.

## TREE NUTS - FOLIAR

Crops of Crop Group 14 (except Almond) including: Beechnut, Brazil nut, Butternut, Cashew, Chestnut, Chinquapin, Filbert, Hickory nut, Macadamia nut, Pecan, Pistachio, Walnut (black and Fnglish)

| Pests Controlled  | Rate (Fl. Oz./Acre) |
|---|---------------------|
| Aphids (except Black pecan aphid), Leafhoppers/Sharpshooters, <i>Phylloxera</i> spp. (leaf infestations), Spittlebugs, Whiteflies | 2.8 to 5.6          |
| Black pecan aphid, Mealybugs, San Jose scale  | 6.4                 |

## Restrictions:

- DO NOT use on Almonds.
- Pre-Harvest Interval (PHI): 7 days
- Minimum interval between applications: 6 days
- Maximum amount allowed per year: 23.0 fluid ounces/Acre (0.36 lb. Al/A)
- Minimum application volume (water): 50 GPA ground application, 25 GPA aerial application
- DO NOT apply pre-bloom or during bloom or when bees are foraging.

# Applications:

Time applications to control San Jose scale according to crawler stage, treating each successive generation. Two applications on a 10 to 14-day interval may be required to achieve control.

# TROPICAL FRUIT<sup>1</sup> - SOIL

Acerola, Atemoya, Avocado, Biriba, Black sapote, Canistel, Cherimoya, Custard apple, Feijoa, Jaboticaba, Guava, Llama, Longan, Lychee, Mamey sapote, Mango, Papaya, Passionfruit, Persimmon, Pulasan, Rambutan, Sapodila, Soursap, Spanish lime, Star apple, Starfruit, Sugar apple, Wax jambu

| Pests Controlled                                  | Rate (FI. Oz./Acre) |  |
|---|---------------------|--|
| Aphids, Avocado lacebugs, Leafhoppers, Whiteflies | 24.0 to 32.0        |  |
| Pests / Diseases Suppressed                       |                     |  |
| Scales, Thrips (foliage-feeding thrips only)      | 32.0                |  |

### Restrictions:

- Pre-Harvest Interval (PHI): 6 days
- Maximum amount allowed per year: 32.0 fluid ounces/Acre (0.50 lb Al/A)
- DO NOT apply pre-bloom or during bloom or when bees are foraging.

# Applications:

Apply specified dosage of Imidacloprid 2F Select in the following method:

1. Chemigation into root-zone through low-pressure drip, trickle, micro-sprinkler or equivalent equipment 1. Use not permitted in California unless otherwise directed by state specific 24(c) labeling.

# **TROPICAL FRUIT - FOLIAR**

Acerola, Atemoya, Avocado, Biriba, Black sapote, Canistel, Cherimoya, Custard apple, Feijoa, Jaboticaba, Guava, Llama, Longan, Lychee, Mamey sapote, Mango, Papaya, Passionfruit, Persimmon, Pulasan, Rambutan, Sapodila, Soursap, Spanish lime, Star apple, Starfruit, Sugar apple, Wax jambu

|   | 7 1011710 0.1    | <del></del> |                     |
|---|------------------|-------------|---------------------|
| 1 | Pests Controlled |             | Rate (Fl. Oz./Acre) |
| L |                  |             |                     |

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| Aphids, Leafhoppers/Sharpshooters, Mealybugs,    | 6.4 |
|--|-----|
| Thrips (foliage-feeding thrips only), Whiteflies |     |
| Pests Suppressed                                 |     |
| Scales   | 6.4 |

#### Restrictions:

- Pre-Harvest Interval (PHI): 7 days
- Minimum interval between applications: 10 days
- Maximum amount allowed per year: 32.0 fluid ounces/Acre (0.50 lb. Al/A)
- DO NOT apply pre-bloom or during bloom or when bees are foraging.

# OTHER CROPS - FOLIAR APPLICATION INSTRUCTIONS

Apply specified rate per acre as a broadcast or directed foliar spray as pest populations begin to build. Thorough uniform coverage is necessary to achieve optimal control. A spray adjuvant may be used to improve coverage. Imidacloprid 2F Select may not knock down established and heavy insect populations. Two applications may be required to achieve control. Scout fields and retreat if needed. Imidacloprid 2F Select may be tank mixed with other insecticides for knock down of pests or for improved control of other pests.

#### **CHRISTMAS TREE - SOIL**

| Pests Controlled                                 | Rate (Fl. Oz./Acre)                     |
|--|---|
| White grub complex (damage from grubs of Asiatic | 16.0 to 32.0                            |
| garden beetle, European and Masked chafer,       | • |
| Japanese beetle and oriental beetle)             |   |

#### Restriction:

Maximum amount allowed per year: 32.0 fluid ounces/Acre (0.5 lb. Al/A)

# Applications:

Soil incorporation and movement of Imidacloprid 2F Select to the root zone is required for activity. Imidacloprid 2F Select can be incorporated most readily when applied to moist soil. Apply specified dosage in one of the following methods;

- 1. Chemigation into root zone through low-pressure drip, trickle, micro-sprinkler or equivalent equipment;
- 2. 18-inch band on each side of the row (small trees) to full broadcast application (large trees) followed by rainfall or 0.25 to 1 inch of irrigation within 12 hours after application.

**Important Notes:** For optimal grub control, apply Imidacloprid 2F Select during adult flight activity, or up to mid-July, when first instar larvae are present.

# **CHRISTMAS TREE - FOLIAR**

| Pests Controlled           | Rate (Fl. Oz./Acre) |
|----------------------------|---------------------|
|                            |                     |
| Aphids, Adelgids, Sawflies | 3.2 to 6.4 c google |

#### Restrictions:

- Minimum interval between applications: 7 days
- Maximum amount allowed per year: 32.0 fluid ounces/Acre (0.50 lb. Al/A)

# Applications:

Apply specific dosage of Imidacloprid 2F Select as a broadcast or directed spray to infested area ensuring thorough coverage. Imidacloprid 2F Select may be applied through properly calibrated ground or aerial equipment. Aerial application of Imidacloprid 2F Select may result in slower activity and reduced control relative to results from ground application.

Gall-forming adelgids - time applications to coincide with full bud-swell or first bud-break of earliest bud-breaking trees. Once galls form spraying will be ineffective.

# POPLAR/COTTONWOOD - SOIL1

Includes: members of the genus Populus grown for pulp or timber

| Pests Controlled               | Rate (FI. Oz./Acre) |
|--------------------------------|---------------------|
| Aphids, Cottonwood leaf beetle | 16.0 to 32.0        |
| Pests / Diseases Suppressed    |                     |
| Phylloxerina popularia         | 16.0 to 32.0        |

#### Restrictions:

- Maximum amount allowed at-plant per year: 32.0 fluid ounces/Acre (0.50 lb. AI/A)
- DO NOT apply pre-bloom or during bloom or when bees are foraging.

# Applications:

Apply specified dosage of Imidacloprid 2F Select in one of the following methods:

- 1. Chemigation through low-pressure drip irrigation;
- 2. For narrow row, cutting orchards/nurseries used for plant propagation, shank into root zone followed by adequate irrigation to promote uptake. Adequate irrigation depends on soil moisture level at application. Under dry conditions 0.25 inch/acre irrigation is recommended.

For Cottonwood leaf beetle, protection against damage will occur when application is made early-season, when the beetles first begin feeding. Larger trees may require earlier treatment as a result of slower uptake. For *Phylloxerina*, apply early in the year, from break of dormancy through May.

<sup>1</sup>Use not permitted in California unless otherwise directed by state-specific 24(c) labeling.

Cutting/Whip-Application Instructions. See details above for Field Application Instructions. 1

| Pests Controlled                 | Cutting Whip Soaking Solution (Fl. Oz. of Imidacloprid 2F Select needed per 100 gallons)  |
|----------------------------------|---|
| Cottonwood leaf beetle           | 13.3 to 26.6 (unhydrated cuttings/whips) 26.6 to 40.1 (partially hydrated cuttings/whips) |
| Pests / Diseases Suppressed      | ·   |
| Aphids<br>Phylloxerina popularia | 13.3 to 26.6 (unhydrated cuttings/whips) 26.6 to 40.1 (partially hydrated cuttings/whips) |

# Restrictions:

Maximum amount allowed at-plant per year: 32.0 fluid ounces/Acre (0.50 lb. Al/A)

# Applications:

Apply Imidacloprid 2F Select in one of the following cuttings/whips soaking methods:

- 1. For freshly cut (hydrated) cuttings/whips, soak plant material in specified solution concentration for 24 hours prior to cold storage. After removal from cold storage, plant as needed;
- 2. For previously hydrated cuttings/whips removed from cold storage, allow plant material to reach room temperature and soak in specified solution concentration for 24 hours prior to planting.

Proper care must be taken in disposal of any residual soaking solution. Solution may be applied to existing trees or other registered crops as long as all product label precautions and restrictions are observed.

Important Notes: Moisture content of cuttings/whips prior to application, the solution concentration and the length of soaking interval interact to affect the amount of product absorbed into plant material. For a constant

soaking interval of 24 hours, drier cuttings/whips absorb a higher quantity of solution and require a lower concentration. Conversely, more hydrated cuttings/whips absorb less solution and require a higher concentration. Soak cuttings/whips in a covered container in absence of UV light. Not all *Populus* sp. clones/varieties/hybrids have been tested for crop safety. Without specific knowledge about a particular *Populus* sp. clone/variety/hybrid, a small number of cuttings/whips of each should be treated and evaluated prior to commercial use.

Use not permitted in California unless otherwise directed by state-specific 24(c) labeling.

POPLAR/COTTONWOOD - FOLIAR1

Includes: members of the genus Populus grown for pulp or timber

| Pests Controlled  | Rate (Fl. Oz./Acre)                                    |
|---|--|
| Aphids, Leaf beetles  | 3.2 to 6.4   |
| Restrictions:   |  |
| Minimum interval between application     Maximum amount allowed per year: | ns: 10 days<br>32.0 fluid ounces/ Acre (0.50 lb. Al/A) |
| , ,   | ,  |
| <ul> <li>DO NOT apply pre-bloom or during b</li> </ul>                    | ploom or when bees are foraging.                       |

# **APPLICATION TO TURFGRASS**

Imidacloprid 2F Select will control the following soil inhabiting pests and larvae found in turfgrass:

<sup>1</sup>Use not permitted in California unless otherwise directed by state-specific 24(c) labeling.

| PEST                               | SCIENTIFIC NAME  |
|------------------------------------|--|
| Northern & Southern masked chafers | Cyclocephala borealis, C. immaculata, and/or C. lurida |
| Asiatic garden beetle              | Maladera castanea                                      |
| European chafer                    | Rhizotroqus majalis                                    |
| Green June beetle                  | Cotinis nitida   |
| May or June beetle                 | Phyllophaga spp.                                       |
| Japanese beetle                    | Popillia japonica                                      |
| Oriental beetle                    | Anomala orientalis                                     |
| Billbugs                           | Spherophorus spp.                                      |
| Annual bluegrass weevil            | Hyperodes spp.   |
| Black turfgrass ataenius           | Ataenius spretulus and Aphodius spp.                   |
| European Crane Fly                 | Tipula paludosa  |
| Mole crickets                      | Scapteriscus spp.                                      |

Imidacloprid 2F Select will suppress cutworms and chinch bugs.

Imidacloprid 2F Select can be applied as directed on turfgrass in the following sites:

| Residential lawns                              | Golf courses             | Playgrounds     |
|--|--------------------------|-----------------|
| Business and office complexes                  | Airports                 | Athletic fields |
| Shopping complexes                             | Cemeteries               | Sod farms*      |
| Multi-family residential complexes             | Parks                    |                 |
| *Do not use in Arizona unless otherwise direct | ted by state-specific 24 | 4(c) labeling.  |

|      | Turf Grass           |          | ( |
|------|----------------------|----------|---|
| Pest | Rate Per Application | Comments | ( ( ( (                                 |

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| Northern & Southern masked chafers,<br>Asiatic garden beetle, European<br>chafer, Green June beetle, May or<br>June beetle, Japanese beetle, Oriental<br>beetle, Billbug, Annual bluegrass<br>weevil, Black turfgrass ataenius,<br>European Crane Fly, Cutworms<br>(suppression) | 1.25 to 1.6 pints/Acre  (Equivalent to 0.46 to 0.6 fl. oz. per 1,000 sq. ft.) | Make application prior to egg hatch of grubs, billbugs, annual bluegrass weevil, and European Crane Fry to maximize control.  |
|--|---|---|
| Pest   | Rate Per Application  | Comments  |
| Chinch bugs (suppression)  Mole crickets   | 1.6 pints/Acre  (equivalent to 0.6 fl. oz. per 1,000 sq. ft.)                 | <ul> <li>For suppression of chinchbugs, make application before the hatching of the first instar nymphs.</li> <li>For control of mole crickets, make application prior to or during the peak egg hatch period.</li> <li>If adults or large nymphs are actively tunneling, combine applications of Imidacloprid 2F Select with a remedial insecticide. Follow label instructions for other insecticides when tank-mixing.</li> </ul> |

- Imidacloprid 2F Select has adequate residual activity so that applications can be made preceding the egg laying activity of the target pests.
- Best control is achieved when applications are made prior to egg hatch of the pests and when rainfall or
  irrigation after application will penetrate vertically in the soil column carrying the active ingredient into
  the zone where insects are normally located.
- In order to move the active ingredient through the thatch, irrigate if rainfall does not occur within 24 hours after application.
  - Consult your local turf, state Agricultural Experiment Station, or State Extension Service Specialists for more specific information regarding timing of application.

# **Application Equipment for Use on Turfgrass**

Dilute Imidacloprid 2F Select with enough water to provide adequate volume to promote thorough distribution into the pest zone. Use only accurately calibrated equipment for application to turfgrass. Apply a uniform, coarse droplet spray, using a low pressure setting to eliminate off target drift. Calibrate on a regular basis to ensure that equipment is distributing product properly.

# **Restrictions:**

- DO NOT apply more than 25.6 fl. oz. (1.6 pt.) (0.4 lb. of active ingredient) per acre per year.
- DO NOT mow turf or lawn area until after sufficient irrigation or rainfall has occurred.
- DO NOT apply when infested turfgrass areas are waterlogged or soil beneath turf is saturated with water. These conditions prevent thorough and consistent distribution.
- DO NOT allow this product to contact plants in bloom while bees are foraging in the treatment area.
- DO NOT graze treatment areas or use clippings from treated areas for feed or forage.
- DO NOT allow runoff or puddling of irrigation water following application
- · Keep Children and pets off treated area until dry.

744 namentals

Imidacloprid 2F Select can be applied to ornamental plants in commercial and residential landscapes and interior plantscapes. Imidacloprid 2F Select is a systemic insecticide that is transported within the plant system from the roots to the upper foliage. Apply Imidacloprid 2F Select into a growing area of the plant that allows absorption of the active ingredient. Adding soluble nitrogen type fertilizers to the spray solution when appropriate can promote the uptake of the active ingredient.

Application can be made by foliar application or soil applications, including soil injection, drenches, and broadcast sprays. Foliar applications offer locally systemic activity against insect pests.

The systemic translocation of active ingredient will be slower when applied to woody plants with soil applications. This delay can take 60 days or longer depending on species and size of plant. To offset this, make applications before anticipated pest infestation.

#### **Restriction for Ornamentals:**

- Outdoor applications cannot exceed a total of 25.6 fl. oz. (1.6 pints) (0.4 lb. of active ingredient) per acre per year.
- No soil injection applications allowed in Nassau or Suffolk counties of New York.
- Do not apply Imidacloprid 2F Select by any application method to linden, basswood, or other *Tilia* species in the state of Oregon.

**ANT MANAGEMENT PROGRAMS:** Use Imidacloprid 2F Select to control aphids, scale insects, mealybugs and other sucking pests on ornamentals with ant populations because it removes honeydew as a food source. To enhance control of ants, supplement with residual sprays, bait placements or other ant control tactics.

**APPLICATION EQUIPMENT FOR FOLIAR APPLICATIONS:** Imidacloprid 2F Select mixes readily with water and may be used in many types of application equipment. Add a commercial spreader/sticker to promote coverage on hard to wet foliage such as holly, pine, or ivy.

Imidacloprid 2F Select is compatible with many commonly used fungicides, miticides, liquid fertilizers, and other insecticides. If applicator has no prior experience with a particular tank mix, check physical compatibility by making a small clear jar test using correct proportions of products to be tank mixed.

### **RESTRICTIONS:**

- Follow application restrictions for commercially grown ornamental not under contract for pollination services but are attractive to pollinators for outdoor foliar applications.
- Do not apply more than 1.6 pt. (0.4 lb. of active ingredient) per acre per year.
- Not for use in commercial greenhouses, nurseries, or on grasses grown for seed, or on commercial fruit and nut trees.
- DO NOT apply through any irrigation system.
- Do not allow runoff or puddling of irrigation water following application.
- Do not apply Imidacloprid 2F Select to areas which are water logged or saturated, which will not allow penetration into the root zone of the plant.
- Do not apply Imidacloprid 2F Select by any application method to linden, basswood, or other Tilia species in the state of Oregon.
- Treated areas may be replanted with any crop specified on an imidacloprid label, or with any crop for which a tolerance exists for the active ingredient.
- For crops not listed on an imidacloprid label, or for crops for which no tolerances for the active ingredient have been established, a 12-month plant-back interval is required.

| Foliar Application To Ornamental trees, Nonbearing Fruit and Nut Tre  | es, Shrubs, Ev       | /ergreens, 🗀 🕬   |
|---|----------------------|------------------|
| Flowers, Foliage Plants, Groundcovers, Interior Plantscapes (Only for | in and around t      | the perimeter of |
| Industrial, Commercial Buildings, Residential and Landscaped Areas)   |                      | (                |
| Pest  | Rate per Application | Comments         |

Use Site

Pest

Rate per Application\*

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| Adelgids, Aphids, Honeylocust plant bug, Diptera (including Rhododendron gall midge, Honeylocust pod gall midge), Froghopper, Galls (including Hickory stem gall), Japanese beetle, Lace bugs, Leaf beetles (including elm and viburnum leaf beetles), Leafhoppers (including glassy-winged sharpshooter), Leaf miners (including boxwood leafminer), Mealybugs, Planthoppers, Psyllids, Sawfly larvae, Scales (including Lecanium, Azalea bark, Calico, Cottony Camellia, Cottony maple, Cottony taxus), Spittlebugs, Thrips (suppression)(including Flower, Pear, |  |  | 1.5 fl. oz.<br>(45 mL) per<br>100 gal. of<br>water | Make foliar applications before high pest populations become established. Reapply on an as needed |  |
|---|--|--|--|---|--|
| and Pine thrips), Treehop vine), Whiteflies   | pers, Weevils (including wh  | ite pine and black                                   |  | basis.  |  |
| Broadcast Application   |  |  | <u> </u>   | ]   |  |
| Pest  | Rate per Application   | Comments   |  |   |  |
| White grub larvae (such   | 0.46 to 0.6 fl. oz. (14 to   | Make broadcast applications by mixing specified rate |  |   |  |
| as Japanese beetle  | 17 mL) per 1,000 sq. ft.   | in enough water to uniformly cover the treated area. |  |   |  |
| larvae, Chafers,  |  | Do not use less than                                 | 2 gallons of wa                                    | ater per 1,000 sq.  |  |
| Phyllophaga spp.,   |  | ft.  |  |   |  |
| Asiatic garden beetle,  |  | In order to move the                                 |  |   |  |
| Oriental beetle)  |  | thatch, irrigate if rainf                            |  | cur within 24   |  |
|   |  | hours after applicatio                               |  |   |  |
| Refer to use directions specific for FLOWERS and GROUND COVERS concerning additional use directions.  |  |  |  |   |  |
|   | <b>Restriction</b> : Do not apply more than 25.6 fl. oz. (1.6 pints) (0.4 lb. of active ingredient) per acre per year. |  |  |   |  |
| , , , ,   | Do not apply Imidacloprid 2F Select by any application method to linden, basswood, or other Tilia species              |  |  |   |  |
| in the state of Oregon.  Soil Application to Ornamental trees, Nonbearing Fruit and Nut Trees, Shrubs, Flowers and  |  |  |  |   |  |
| _ · ·   | mental trees, Nonbearing   | Fruit and Nut Trees,                                 | Shrubs, Flow                                       | ers and   |  |
| Groundcovers  | atou of industrial and seven   | aavaial buildinaa aaad                               | anidombial are e-                                  |   |  |
|   | (Only in and around perimeter of industrial and commercial buildings and residential areas, and state,                 |  |  |   |  |
| national, and private wooded and forested areas)  |  |  |  |   |  |

Ornamental trees, **Nonbearing Fruit** and Nut Trees, Shrubs, Flowers and Groundcovers

Adelgids, Aphids, Armored scales (suppression), Black vine weevil larvae, Eucalyptus longhorned borer, Flatheaded borers (including bronze, alder and emerald ash borers), Japanese beetles, Lace bugs, Leaf beetles (including elm and viburnum leaf beetles), Leafhoppers (including glassy-winged sharpshooter), leafminers. Mealybugs. Pine tip moth larvae, Plant bugs, Psyllids, Roundheaded borers, Royal palm bug, Sawfly larvae, Soft scales, Thrips (suppression), White grub larvae, Whiteflies

# To apply to Trees:

Use the following rates as a function of tree diameter at breast height (DBH):

- Apply 0.1 to 0.4 fl. oz. per inch of trunk diameter (D.B.H.)
- You may use the higher rate (0.3 0.4)fl. oz.) only for trees greater than 15 DBH to control the following pests:

Emerald Ash borer, Eucalyptus longhorned borer, Bronze birch borer, Alder borer

Restriction: Do not apply more than 25.6 fl oz (1.6 pints) (0.4 lb. of active ingredient) per acre per year.

#### Shrubs:

Apply 0.1 to 0.2 fl. oz. (3 to 6 mL) per foot of shrub height.

# Flowers and Groundcovers:

- Apply 0.46 to 0.6 fluid ounces (14 to 17 mL) per 1000 sq. ft.
- Apply as a broadcast treatment and incorporate into the soil before planting or apply to established plants prior to flowering or after petal fall is complete. If application is made to established plants, irrigate immediately after application.

\*Diameter at Breast Height (DBH) is measured at 4.5 feet from the ground.

# **Application Techniques: Trees**

# **Soil Injection**

Mix required dosage in sufficient water to inject an equal amount of solution in each hole. For concentrate injectors mix required dose with up to one gallon of water per DBH inch. Maintain a low pressure and use sufficient solution for distribution of the liquid into the treatment zone. Dilution rate may vary depending on equipment used, tree size and application rate. Refer to the instructions for injector equipment being used for quidance.

- GRID SYSTEM: Make applications in a grid pattern on 2.5 foot centers within the drip line of the tree.
- CIRCLE SYSTEM: Make applications in holes evenly spaced approximately 2 -3 feet apart in a cifcle within the drip line of the tree. Larger trees may require additional application circles.
- BASAL SYSTEM: Make applications into holes evenly spaced around the base of the tree trunk no more than 6 to 12 inches out from the base.

Soil Drench

Uniformly apply the dosage in no less than 10 gallons of water per 1,000 square feet as a drench around the base of the tree, directed to the root zone. Remove any plastic or other barrier that may prevent drench solution from reaching the root zone.

# For All Application Techniques:

- Inject an equal amount of water and solution in each hole.
- Use low pressure and sufficient solution for thorough distribution into the treatment zone.
- Maintain soil moisture for 7 to 10 days.
- Application to trees already heavily infested with borers listed may not prevent the eventual loss of the trees.

# **Restrictions for Trees:**

- **Do not** use less than 4 holes per tree.
- No soil injection applications allowed in Nassau or Suffolk counties of New York.
- **Do not** apply more than 25.6 fl. oz. (1.6 pints) (0.4 lb. of active ingredient) per acre per year.
- Do not apply Imidacloprid 2F Select by any application method to linden, basswood, or other Tilia species in the state of Oregon.

# **Application Techniques: Shrubs**

Soil Injection: Apply to individual plants using dosage indicated.

**Soil Drench:** Uniformly apply the dosage in no less than 10 gallons of water per 1,000 square feet as a drench around the base of the shrub, directed to the root zone. Remove plastic or any other barrier that will stop solution-from-reaching the root zone.

- Mix required dosage in sufficient water to inject an equal amount of solution in each hole.
- Maintain a low pressure and use sufficient solution for distribution of the liquid into the treatment zone.
- Maintain soil moisture for 7 to 10 days.

### **Restrictions for Shrubs:**

- Do not use less than 4 holes per shrub.
- No soil injection applications allowed in Nassau or Suffolk counties of New York
- **Do not** apply more than 25.6 (1.6 pints) (0.4 lb. of active ingredient) per acre per year.

# **POME FRUITS** (For Residential Areas Only)

| Crop                    | Pest   | Rate per<br>Application |  |
|-------------------------|--|-------------------------|--|
|                         | Aphids(except Woolly apple aphid)                  | 1.5 fl. oz. (45 mL) per |  |
| Apple, Crabapple,       | Leafhoppers (including glassy-winged sharpshooter) | 100 gal.                |  |
| Loquat, Mayhaw, Pear,   | Leafminer  | or                      |  |
| Pear (Oriental), Quince | Mealybugs  | 6.0 fl. oz. per acre    |  |
| •                       | San Jose scale                                     | LLLC                    |  |

# **Application Instructions:**

- Apply specified dosage as foliar spray as needed after petal-fall is complete.
- For control of rosy apple aphid, apply prior to leafrolling caused by the pest.
- For first generation leafminer control, make first application as soon as petal fall is complete. Greatest leafminer control will result from the earliest possible application. For second and succeeding generations of leafminer, optimal control is obtained from applications made early in the adult flight against egg and early instar larvae. A second application may be required 10 days later if severe pressure continues or if generations are overlapping. A single application may result in suppression only. Imidacloprid 2F Select will not control late stage larvae.
- For San Jose scale, time applications to the crawler stage. Treat each generation.
- For late season (preharvest) control of leafhopper species, apply Imidacloprid 2F Select while most

leafhoppers are in the nymphal stage.

• For optimal control of mealybug, insure good spray coverage of the trunk and scaffolding limbs or other resting sites of the mealybug.

#### Restrictions:

- Do not apply more than 6.0 fluid ounces per acre in a single application.
- Do not make more than 4 applications per acre per year.
- Do not apply more than 24 fl. oz. per acre per year.
- Allow 10 or more days between applications.
- Allow at least 7 days between last application and harvest.
- Do not apply pre bloom or when bees are foraging.

\*Not for use in California for control on pears.

PECAN\*(For Residential Areas Only)

| Crop                   | Pest                  | Rate per Application        |
|------------------------|-----------------------|-----------------------------|
| PECAN*                 | Black margined aphid  | 1.5 fl. oz. (45 ml) per     |
| (For Residential Areas | Pecan leaf phylloxera | 100 gal                     |
| Only)                  | Pecan spittlebug      | or                          |
| •                      | Pecan stem phylloxera | 6.0 fl. oz./A. <sup>1</sup> |
|                        | Yellow pecan aphid    |                             |

# **Application Instructions:**

- Apply specified dosage as foliar application as pest pressure begins to increase.
- Make a second application 10 to 14 days after first if field scouting reveals continued pest pressure.
- Use of an organosilicone based spray adjuvant at specified rate can insure thorough coverage of foliage.

#### Restrictions:

- Do not apply more than a total of 18.0 fluid ounces of Imidacloprid 2F Select per acre per year.
- Do not make more than 3 applications.
- Allow 10 or more days between applications.
- Do not apply pre bloom or when bees are foraging.
- Do not use on pecans in California unless directed by state-specific 24(c) labeling.

<sup>1</sup>The amount of Imidacloprid 2F Select required per acre may vary depending on tree size and volume of foliage present. The rates given are based on a standard of 400 gallons of dilute spray solution per acre for large trees with full foliage.

#### **GRAPES**

(For use only in and around perimeter of Industrial, Commercial Buildings, and Residential Planting Areas)

| Crop  | Pest Rate per Ap   |  |  |
|---|--|--|--|
| Grapes (For use only in and around perimeter of Industrial, Commercial Buildings, and Residential Planting Areas) | Leafhoppers (including glassy-winged sharpshooter) Mealybugs | 1.5 fl. oz. (45 mL) per 100 gal<br>or<br>3.0 fl. oz./A |  |

# **Application Instructions:**

Apply specified dosage as a foliar spray using 200 gallons of water per acre.

### **Restrictions:**

- Do not apply more than a total of 6.0 ounces of Imidacloprid 2F Select per acre per year.
- · Allow at least 14 days between applications.
- Applications may be applied up to and including day of harvest.

| IMIDACLOPRID 2F SELECT CONVERSION CHART FOR LINEAR APPLICATION RATE |   |     |      |      |      |      |            |      |
|---|---|-----|------|------|------|------|------------|------|
| RATE (Fluid ounces/Acre)  | Fluid ounces/Acre Rate in Fluid Ounces/1,000 Row Feet Based On Average R Spacing (in inches): |     |      |      |      |      | verage Rov |      |
|   | 10  | 15  | 20   | 25   | 30   | 35   | 40         | 45   |
| 10  | .19   | .29 | .38  | .48  | .57  | .67  | .76        | .86  |
| 12  | .23   | .34 | .46  | .57  | .69  | .80  | .92        | 1.03 |
| 14  | .27   | .40 | .54  | .67  | .80  | .94  | 1.07       | 1.21 |
| 16  | .31   | .46 | .61  | .77  | .92  | 1.07 | 1.22       | 1.38 |
| 18  | .34   | .52 | .69  | .86  | 1.03 | 1.21 | 1.38       | 1.55 |
| 20  | .38   | .57 | .76  | .96  | 1.15 | 1.34 | 1.53       | 1.72 |
| 22  | .42   | .63 | .84  | 1.05 | 1.26 | 1.47 | 1.68       | 1.89 |
| 24  | .46   | .69 | .92  | 1.15 | 1.38 | 1.61 | 1.84       | 2.07 |
| 26  | .50   | .75 | .99  | 1.24 | 1.49 | 1.74 | 1.99       | 2.24 |
| 28  | .54   | .80 | 1.07 | 1.34 | 1.61 | 1.87 | 2.14       | 2.41 |
| 30  | .57   | .86 | 1.15 | 1.43 | 1.72 | 2.01 | 2.29       | 2.58 |
| 32  | .61   | .92 | 1.22 | 1.52 | 1.84 | 2.14 | 2.45       | 2.75 |

**Important**: The Imidacloprid 2F Select rate applied affects the length of control and the degree of control. Row-spacing X Imidacloprid 2F Select rate combinations in shaded blocks may not provide and are not recommended for long-term, residual control. Use higher listed rates where pest pressure may occur later in crop development or where pest pressure is severe or continuous. Prime Source, LLC offers no warranty for use of Imidacloprid 2F Select at rates below 0.7 fluid ounces/1,000 row-feet.

# STORAGE AND DISPOSAL

Do not contaminate water, food, or feed by storage or disposal.

**PESTICIDE STORAGE**: Store in a cool, dry place and in such a manner as to prevent cross contamination with other pesticides, fertilizers, food, and feed. Store in original container and out of the reach of children, preferably in a locked storage area.

Handle and open container in a manner as to prevent spillage. If the container is leaking, invert to prevent leakage. If container is leaking or material spilled for any reason or cause, carefully dam up spilled material to prevent runoff. Refer to Precautionary Statements on label for hazards associated with the handling of this material. Do not walk through spilled material. Absorb spilled material with absorbing type compounds and dispose of as directed for pesticides below. In spill or leak incidents, keep unauthorized people away.

**PESTICIDE DISPOSAL**: Wastes resulting from the use of this product may be disposed of on site or at an approved waste disposal facility.

#### **CONTAINER DISPOSAL:**

[Nonrefillable Containers 5 Gallons or Less] Nonrefillable container. DO NOT reuse or refill this container. Offer for recycling if available. Triple rinse container (or equivalent) promptly after emptying. Triple rinse as follows: Empty the remaining contents into application equipment or a mix tank and drain for 10 seconds after the flow begins to drip. Fill the container 1/4 full with water and recap. Shake for 10 seconds. Pour rinsate into application equipment or a mix tank or store rinsate for later use or disposal. Drain for 10 seconds after the flow begins to drip. Repeat this procedure two more times. Then offer for recycling or reconditioning, or puncture and dispose of in a sanitary landfill, or by other procedures approved by State and local authorities.

Plastic containers are also disposable by incineration, or, if allowed by State and local authorities, by burning. If burned stay out of smoke.

[Nonrefillable containers larger than 5 gallons] Nonrefillable container. DO NOT reuse or refill this container. Offer for recycling if available. Triple rinse or pressure rinse container (or equivalent) promptly after emptying. Triple rinse as follows: Empty the remaining contents into application equipment or a mix tank. Fill the container 1/4 full with water. Replace and tighten closures. Tip container on its side and roll it back and forth, ensuring at least one complete revolution, for 30 seconds. Stand the container on its end and tip it back and forth several times. Turn the container over onto its other end and tip it back and forth several times. Empty the rinsate into application equipment or a mix tank or store rinsate for later use or disposal. Repeat this procedure two more times. Pressure rinse as follows: Empty the remaining contents into application equipment or a mix tank and continue to drain for 10 seconds after the flow begins to drip. Hold container upside down over application equipment or mix tank and continue to drain for 10 seconds after the flow begins to drip. Hold container upside down over application equipment or mix tank or collect rinsate for later use or disposal. Insert pressure rinsing nozzle in the side of the container, and rinse at about 40 psi for at least 30 seconds. Drain for 10 seconds after the flow begins to drip. Then offer for recycling or reconditioning, or puncture and dispose of in a sanitary landfill, or by other procedures approved by State and local authorities. Plastic containers are also disposable by incineration, or, if allowed by State and local authorities, by burning. If burned stay out of smoke.

#### CONDITION OF SALE AND LIMITATION OF WARRANTY AND LIABILITY

**NOTICE:** Read the entire Directions for Use and Conditions of Sale and Limitation of Warranty and Liability before buying or using this product. If the terms are not acceptable, return the product at once, unopened, and the purchase price will be refunded.

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